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The Reichsbank

1876-1900



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CHAPTER I.

INTRODUCTION.

THE GERMAN MONETARY AND BANKING SYSTEM BEFORE THE FOUNDING OF THE EMPIRE.

The newly established German Empire found in the organization of the coinage, paper money, and bank-note systems an urgent and difficult task. Probably in no department of the entire national economic system were the disadvantages of the political disunion of Germany so clearly defined as in this; in no economic department were greater advantages to be expected from a political union.

Although the customs union (*Zollverein*) had happily united the greater part of Germany in a commercial union, similar attempts in monetary affairs had met with but modest success, and were absolutely fruitless in banking.

The inconvenience most complained of was the multiplicity and variety of the different coinage systems (seven in all) in the different states, also the want of an adequate, regulated circulation of gold coins. This deficiency had its origin in the establishment of the standard. All German states had a silver standard with the single exception of the free city of Bremen, the monetary system of which rested on a gold basis. Gold coins were therefore in circulation only to a limited extent and at fluctuating rates. As a result of the general economic development, however, the need for a more convenient means of payment for larger amounts had considerably increased dur-

ing the last two decades before the foundation of the Empire. Silver money became more and more burdensome and inconvenient for such payments.

This need led to the circulation in alarming proportions of paper money—not only of government paper money but also of bank notes.

True, there existed in Germany no so-called "freedom of banking," and the establishment of banks of issue (Notenbanken) could take place only through government concession. In reality, however, especially in a number of smaller states, numerous banks received an extensive and even unrestricted right to issue notes; the aim of these banks from the outset was to extend into adjoining German territories, beyond the borders of the state for which they were licensed, their business operations and their note issue.

Thus there existed in Germany before the foundation of the Empire 31 banks of issue, for which various regulations had been made by the various states, and the statutes of which differed considerably from one another.

A large number of these banks was concerned with utilizing most extensively the right to issue notes—that is, with putting as many notes as possible into circulation. Since notes for smaller sums were not so often returned for payment to the place of issue as those for larger amounts, not only the different governments but also the banks issued large amounts of small notes, down to notes for one taler.

Since the legal control of note issue was frequently inadequate, many banks did not provide sufficient cover for notes. Besides, the banks of issue engaged to some extent in business which tied up permanently their working capital. This was not proper for banks, the liabilities of which consist of obligations, such as notes, falling due at all times.

Owing to the impossibility of bringing about uniform regulations for German banks of issue, several German states attempted through prohibitive measures to keep out of their territory the notes of banks licensed by other states. These prohibitions were not strictly observed in general trade, but were authoritative for all public treasuries and were regarded by the public as great inconveniences.

The abuses in the currency and in the banking system were closely connected. Nevertheless, the reform which had long been recognized as necessary could not be brought into existence in its entirety at one stroke. The problem to be solved was so complicated that progress could be made only step by step and by constant consideration of the close connection between the different parts of the entire work of reform. As long as a uniform German coinage system was wanting, as long as there were no proper provisions for a sufficient gold circulation, no thorough rearrangement of paper currency and the banknote systems was possible. On the other hand, the abuses in the latter increased the difficulty of reforming the coin-A rational bank constitution is one of the most important preliminary conditions for the maintenance of an orderly monetary system. The reorganization of the banking system had to form the keystone of the whole work of reform and instill into the new order of things a vital and progressive spirit.

The preliminary legal condition for a uniform monetary and banking reform was created by article 4 of the Constitution of the North German Confederation of July 26, 1867, and the Constitution of the German Empire of April 16, 1871, respectively, according to which the following are subject to the supervision and legislation of the Confederation and of the Empire: (3) The regulation of coinage, weights, and measures, and the formulation of principles for the emission of funded and unfunded paper money; (4) general regulations for banking.

There were still considerable difficulties in the way of an effective organization of the monetary and banking systems as long as the South German states did not belong to the Confederation. Before the foundation of the Empire, therefore, the coinage question got only as far as preparations for an inquiry, and these were dropped for a time in consequence of the war with France. Laws were decreed to prevent a further increase of paper money and bank notes. The law of March 27, 1870, concerning the issue of bank notes, prescribes that the right to issue bank notes can be conferred only by a federal law, and that, similarly, an extension of existing privileges with respect to notes can be granted only by a federal law.

After the founding of the Empire, this law was promulgated as a law of the Empire, and went into force in Baden, South Hesse, Württemberg, and Bavaria on January 1, 1872. Württemberg and Baden, which hitherto had not had any banks of issue, established such institutions—the Württembergische Notenbank at Stuttgart and the Badische Bank at Mannheim—just before

the law went into force. The number of German banks of issue was thus increased to 33.

The law was originally intended to be valid only until July 1, 1872. It was subsequently found necessary, however, to prolong the period of validity three times.

A similar limitation was decreed with regard to the issue of government paper money by the law of June 16, 1870, concerning the issue of paper money. Later, this law was likewise promulgated as a law of the Empire, and made the further issue of paper money dependent on a federal law.

These two laws, passed merely to prevent existing conditions from becoming worse, were the only legislative measures adopted with respect to monetary and banking affairs during the period of the North German Confederation. The foundation of the Empire, which also brought South Germany into the political union, gave to legislation a greater freedom of action which was at once taken advantage of.

REFORM OF COINAGE AND PAPER MONEY.

Immediately after the conclusion of peace with France, the imperial government took up the question of coinage reform. The law concerning the minting of imperial gold coins was proclaimed as early as December 4, 1871; this law laid down fundamental principles with respect to the monetary system, the standard, and the legal basis of German coinage.

The consolidation of the German monetary system was completed by the Coinage Act of July 9, 1873. This law proclaimed the imperial gold standard, which was to

take the place of all standards existing in the different states, as the ultimate aim of coinage reform, and settled all details both for the future system and for the one provisionally permitted during the transition stage (during which the large coins of the taler standard were to be legal tender in addition to the imperial gold coins), a standard which was called "imperial standard" to distinguish it from the definitive imperial gold standard.

The Reichstag, on its own initiative, added a concluding clause to the Coinage Act of July 9, 1873. This clause, strictly speaking, did not touch upon coinage, but introduced drastic regulations concerning bank notes and paper money. It provided that the paper money issued by the various federal states should be withdrawn at the latest by January 1, 1876, and that it be replaced, in accordance with an imperial act to be framed, by imperial paper money. The regulation regarding bank notes reads as follows:

"All bank notes not based on the imperial standard are to be withdrawn by January 1, 1876. After this date only notes for amounts of not less than 100 marks and based on the imperial standard may remain in circulation or be issued."

The imperial act regarding the issue of paper money, which article 18 of the Coinage Act set forth, was promulgated on April 30, 1874, as an act concerning the issue of imperial treasury notes (*Reichskassenscheine*). It replaced by uniform imperial paper money, the paper money which had been issued in 22 different states, for which a definite sum of 120,000,000 marks (against some

184,000,000 marks in circulating paper money of the federal states) was fixed. This sum was at first increased, however, by advances in imperial treasury notes to different state governments, in order to facilitate the withdrawal of their paper money. The repayment was to be made in fifteen years (December 31, 1890).

THE PROBLEMS OF BANKING REFORM.

The settlement of the paper currency question was delayed by its close relation to the banking question and by the many difficulties that prevented a satisfactory solution of the latter. The individual banks of issue were private institutions; their privileges with regard to the issue of notes represented well-earned private rights. The difficulty was to bring about an effective rearrangement without injuring these privileges.

A direct abolition of these note privileges was, from the very beginning, entirely out of the question. The only possible course was to decree uniform regulations of a general nature, which would cause the banks to limit duly the number of their branches, to reduce their note circulation, and to provide adequate cover. The difficulty was to make the measures sufficiently effective without injuring the rightfully acquired privileges of the various banks.

Public opinion and the great majority of experts in banking, however, favored the view that banking reform must not be limited to such measures. The crises of 1857 and 1866 had shown that banks of issue had other duties than to satisfy private claims for credit;

that they have to fulfill rather, side by side with these claims, important functions in the public interest. Thus they have, above all, to supervise and regulate the entire monetary circulation, from the point of view of the home trade as well as in relation to foreign currencies. The conviction gained ground that these tasks could be fulfilled only from one centre, that a centralized management was indispensable, and therefore that a central bank was necessary, which either stands alone or else surpasses all other banks of issue so that it exercises a dominating influence.

These important functions had hitherto been fulfilled for the kingdom of Prussia by the Prussian Bank. latter had in the year 1866 afforded a firm support to all cash and credit transactions at a time when a number of other banks of issue either limited or suspended their bill purchases and thus refused their services at a critical moment in national economic affairs. The activity of this bank was, however, confined chiefly to the kingdom of Prussia. It did not have the right of establishing branches outside of Prussia; on the contrary, when in the year 1865 the Prussian government wanted to pass an act empowering the Prussian Bank to establish branches outside of Prussia, the bill was killed by the Landtag, which imposed the condition that the uncovered note circulation should be limited to 60,000,000 talers. When, after the war with France, it was found necessary to establish a branch bank in Alsace in order to meet the need for credit caused by the liquidation of the branches of the Bank of France, the authority for this step was obtained only by means of an emergency decree of June

10, 1871, based on section 63 of the Constitution, which became law on February 26, 1872. In the same way it was necessary to pass a special bill to allow the bank to meet the wishes of the free city of Bremen for a branch establishment there (Act of June 15, 1872).

The conditions in Alsace-Lorraine and Bremen showed how great was the necessity in states outside Prussia for a union with a large central bank. The uniform economic system of the German Empire required a common centre, where all cash and credit transactions could converge; a German Reichsbank, the highest duty of which should consist in supervising and regulating the German monetary system, was looked upon as the natural final step in German monetary and banking reform. The regulation of existing banks of issue could only limit existing abuses. The Reichsbank, on the other hand, seemed to be the living force necessary to carry out, uphold, and develop further the new monetary and banking constitution.

Under the conditions then existing, the foundation of an entirely new Reichsbank in accordance with this idea was quite out of the question; only the transformation of the Prussian Bank into an imperial institution could be considered. The Prussian Bank already held for the greater part of Germany the position which the new Reichsbank was to hold for the whole of Germany. A Reichsbank in addition to the Prussian Bank would have been impossible.

THE BANK ACT AND THE REICHSBANK.

Considerable difficulties, however, stood in the way of the conversion of the Prussian Bank into a Reichsbank, and these delayed the working out and introduction of a bank bill. Finally, in July 1874, a bill was laid before the Bundesrat which abandoned for the time being the idea of a Reichsbank, and was content with formulating guiding principles for the regulation of existing banks of issue. It added a clause forcing those banks of issue which did not wish to be restricted to the territory of their own state to agree that the Bundesrat could, on January 1, 1886, announce the withdrawal of their privilege of issuing notes. At this date the Empire was to have an entirely free hand in a thorough reorganization. The Bundesrat passed this bill with but few alterations. On November 5 the bill was forwarded to the Reichstag.

At the very first reading (November 16, 1874) it was clear that a large majority of the House regarded the immediate establishment of a Reichsbank as a necessary preliminary condition for banking reform. The bill was referred to a committee, which in its first sitting (November 21, 1874) resolved at once, by a vote of 13 to 4, "that the committee does not consider a discussion of the bank bill desirable until a decision has been arrived at regarding the establishment and organization of the Reichsbank."

As an outcome of this decision the deliberations concerning the cessions to the Empire by the Prussian Bank led to the desired result. Prussia declared itself ready, after the withdrawal of its invested capital of 5,720,400 marks and of its share (9,000,000 marks) of the reserve

fund legally belonging to it on the dissolution of the bank, to cede to the Empire the Prussian Bank which was to be transformed into a Reichsbank, on the following terms:

- 1. Prussia was to receive a lump sum of 15,000,000 marks as compensation for the net profits from the Prussian Bank of which it is now deprived.
- 2. The Reichsbank was to assume the obligation to which the Prussian Bank was bound by the contract of 1856 of paying to Prussia a yearly revenue of 1,865,730 marks until 1925.
- 3. A special understanding was to be arrived at with regard to taking the real estate of the Prussian Bank.
- 4. The private shareholders of the Prussian Bank were to have the right to exchange their shares for shares of the same nominal value in the Reichsbank.

The proposals of Prussia were accepted by the Bundesrat, and on this basis it was decided to transform the Prussian Bank into a Reichsbank. The regulations in the bill affecting the existing banks of issue (which, to distinguish them from the Reichsbank, were now termed *Privatnotenbanken*) were not affected to any appreciable extent by the establishment of the Reichsbank.

In order to avoid the introduction of a new bill and to avoid another first reading a member of the Reichstag committee was induced to introduce formally as his own motion the modifications decided upon by the Bundesrat. The bill thus supplemented by the creation of the Reichsbank was accepted without radical changes both by the committee and, later, by the Reichstag in full session after the second and third readings, and the act was published as the Bank Act of March 14, 1875.

GENERAL PROVISIONS OF THE BANK ACT OF MARCH 14, 1875.

The fundamental principles of the Bank Act are as follows:

It contains, first, a number of general regulations as to the issue of notes. The right of issuing notes can be obtained or extended only through an imperial law. obligation is imposed to accept bank notes as payment in private transactions, and no obligation can be imposed for public treasuries by the laws of any particular state: the circulation of foreign bank notes based on the standard of the Empire is prohibited; bank notes may only be for amounts of 100, 200, 500, 1,000, and multiples of 1.000 marks; the banks are obliged to redeem their notes at all times at their full nominal value; issuing banks are not allowed to accept bills, nor to conclude on their own account or that of others time transactions in goods and securities; four times a month they must publish in the Reichsanzeiger (Imperial Gazette) their assets and liabilities according to a detailed scheme, an exact balance sheet, and also within three months after the end of the business year a statement of the year's profit and loss.

Among the measures which are binding for all banks, the so-called indirect contingent (indirekte Kontingentierung) of bank notes not covered by cash (Barvorrat; see below and also note at foot of p. 80) is of especial importance. For each e-isting bank of issue and also for the Reichsbank a certain sum was fixed to which it might issue notes in excess of its cash holdings. In case this sum be exceeded, a yearly tax of 5 per cent on the excess is to be paid to the imperial treasury. As cash may

be reckoned "the amount held by the bank in current German coin, imperial treasury notes, notes of other German banks, and gold in bullion or foreign coin, the pound fine to be reckoned at 1,392 marks." In case the authority of a bank to issue notes expires, the amount to which the bank was formerly allowed to issue uncovered notes (the bank's contingent) is added to that of the Reichsbank.

The sum total of contingents was reckoned at 385,000,000 marks, of which 250,000,000 marks made up the share of the Reichsbank.

Through this system of note taxes an effort was made to limit the issue of uncovered notes to an amount not dangerous for the German monetary system. In contrast to the English bank act, however, this safety was not to be obtained by means of an impassable limit nor was the elasticity of note circulation to be impaired. The rigid limitation of the uncovered note circulation of the Bank of England had on various occasions led to acute crises. The fear that the bank might reach the limit of its note reserve and, as a result, be forced to suspend credit, caused at critical periods a panic-like run on the bank, since everyone endeavored to get a supply of ready money, either in coin or notes, by discounting bills, etc. Three times it had been found necessary, in order to allay the panic, to ignore the limitation on uncovered notes.

These experiences caused German legislators to adopt a new course. Banks were allowed to exceed the legal limit assigned to them (that is, to exceed their note "contingent"), but by means of the 5 per cent tax on the excess of uncovered notes, the banks were to be forced to work against an excess of the "contingent" by raising their rate of discount to at least 5 per cent.

This system has become of great importance in the development of note issues in Germany.

The regulations thus far mentioned, with which all banks of issue were compelled to comply, were not, however, sufficient to attain the end aimed at in banking reform. In order to bring more extensive measures into harmony with well-earned private rights, the private issuing banks were allowed by the Bank Act the choice of having their note circulation and their whole sphere of business strictly confined to the territory of that state which had conferred on them the right to issue notes, or of conforming of their own free will to a number of farreaching regulations.

The new regulations provided specially that the banks must bind themselves to keep at all times a reserve covering at least one-third of the notes issued by them, and consisting of current German coin—imperial treasury notes or gold in ingots or foreign coin—and to hold good commercial bills for the remainder of the outstanding notes.

The banks were also obliged to agree that notice of revocation of their right to issue notes might be given first on January 1, 1891, and then at intervals of ten years. In this way legislation was to be assured a free hand in future uniform regulations of banking.

Furthermore, regulations were framed concerning the places where bank notes were redeemable, the mutual acceptance of notes of those banks which conformed to the optional regulations, the accumulation of a reserve fund, and the publication of the discount rate.

Certain measures of relief were provided for those banks which would limit their issue of notes to the amount of their capital stock.

These measures were for the most part already contained in the government bill.

THE REICHSBANK.

To these were added the provisions concerning the Reichsbank. Section 12 of the Bank Act states:

"Under the name 'Reichsbank' a bank is established under the supervision and guidance of the Empire, with the powers of a corporate body, and with the task of regulating the monetary circulation in the entire Empire, of facilitating the settlement of payments, and of utilizing available capital."

The capital stock of the Reichsbank was fixed a at 120,000,000 marks (instead of 60,000,000 in the case of the Prussian Bank); it was divided into 40,000 shares of 3,000 marks each, each share bearing the name of the holder. It was decided that the Empire should not put any capital into the enterprise.

The well-tested constitution of the Prussian Bank was, in all essential features, taken as the pattern for the constitution given to the Reichsbank.

The supervision of the Reichsbank by the Empire is exercised through a council of curators (Curatorium) com-

a In conformity with the Revised Bank Act of June 7, 1899, the capital stock was brought up to 150,000,000 marks by the end of the year 1900 by the issue of new shares, and was raised to 180,000,000 marks by the end of the year 1905 (cf. p. 342).

posed of the Chancellor of the Empire, who is president, and four members, one of whom is designated by the Emperor and the other three by the Bundesrat. The direction of the Reichsbank is exercised by the Chancellor and under him by the Reichsbank Directorate (Direktorium). A deputy can be appointed in place of the Chancellor. The Reichsbank Direktorium is the administrative and executive, and, so far as the outside world is concerned, the representative body of the Reichsbank (cf. It consists of a president, a vice-president (since D. 42). 1887), and the required number of members (six), who are appointed for life by the Emperor upon the nomination of the Bundesrat. The officers of the Reichsbank have the rights and duties of civil servants of the Empire; they may not own any shares in the Bank. The accounts of the Reichsbank are audited by the board of accounts (Rechnungshof) of the German Empire.

As compared with the Empire, the part taken by private shareholders in the management of the Bank is very limited. The main duty of representatives of the shareholders is to help the managers of the Bank with expert advice, and, in addition, to form a protection for large banks of issue against the dangers which have arisen often enough from too close a connection with the financial administration of the country.

The shareholders exercise their part in the administration of the Bank through the general meeting and through a committee (*Zentralausschuss*) elected in the general meeting.

The general meeting of the shareholders is held annually in March, at Berlin, in accordance with the Reichsbank Statute (cf. Laws, pp. 90–100°), but it can also be convened in extraordinary session at any time. This meeting receives annually the report of the administration, the balance sheet, and the statement of profit and loss, and chooses the members of the central committee; it has also to decide all points relating to the increase of capital stock and alterations of the statute.

The central committee is the permanent representative body of the shareholders over against the administration. It consists of fifteen members. All members must be residents of the Empire, and at least nine of them must reside in Berlin.

The central committee meets at least once a month under the chairmanship of the president of the Reichsbank Directorate; reports of the total business are laid before it monthly, and the views of the Directorate regarding the general state of business and proposals for any necessary measures are stated. The opinion of the central committee is sought on a number of questions, such as the determination of the discount rate and the highest sum to which the funds of the Bank can be applied to loans on collateral. The purchase of securities for the account of the Bank can take place only after the amount to which the funds of the Bank can be used for this purpose has been fixed with the consent of the central committee.

Three deputies of the central committee, chosen for a year from its members, exercise continuous special control over the management of the Reichsbank. These

a German Imperial Banking Laws, published by National Monetary Commission.

deputies are authorized to attend with advisory powers all sittings of the Directorate, and to examine the books of the Bank. Business transactions with the treasury of the Empire or of the federal states, for which terms other than those general in banking are to be made, must be brought to the knowledge of the three deputies, and on the motion of one deputy must be laid before the central committee; unless the majority of the committee decide for the transactions in question, they must be abandoned.

As in the case of the Reichsbank Directorate in Berlin, the Bank Act arranged that the managing officials of the head branches (Hauptstellen) to be founded in larger places other than Berlin, should have the assistance of representatives of the shareholders; these are the district committees, the members of which are chosen by the Chancellor of the Empire from the number of those shareholders living in, or in the immediate neighborhood of, the seat of the branch establishment. Reports of the business of the head branch are laid before the district committee monthly. Two or three members are chosen by the committee from its own number to act as deputies (Beigeordnete) and to exercise a special and constant control over the business transactions of the head branches.

Through the cooperation of the Reichsbank authorities, who are not interested in the financial profits of the Bank, with the representatives of the shareholders, who are practical business men, the Bank management is safeguarded, since it takes into consideration the interest of the public; and at the same time the experience and business knowledge of the shareholders, who are financially inter-

ested in the success of the Bank, are utilized in the guidance of the Bank. This bank organization, which strikes the mean between a purely state bank and a purely private one, has proved to be the best system according to the experiences of most European countries. On the occasion of the deliberations, in the years 1889 and 1899, over the renewal of the privilege of the Reichsbank, the demand was made for the transformation of the Reichsbank into a state (government) bank, in that the Empire was to acquire all the shares and so do away with the shareholders and their cooperation in the administration of the Bank. The Government, however, as well as the majority of the Reichstag, were on both occasions opposed to this demand. The representative of the governments of the various states stated distinctly, during the deliberations of the committee in charge of the revision of the Bank Act in 1899, that the state governments were unanimous in their decision "to oppose on political, economic, and financial grounds the transformation of the Reichsbank into a state bank."

The Reichsbank is endowed with important rights to enable it to fulfill the tasks allotted to it by the Bank Act; the Bank also has extensive obligations.

The Reichsbank has, first, the right of issuing notes without direct limitation, according to the requirements of its business. Indirectly, its issue of notes is limited, first, by the 5 per cent tax on uncovered notes issued in excess of the set limit (contingent); secondly, through the regulation that the Bank must always hold as security metal and imperial treasury notes for at least one-third of the note issue, and for the remainder discounted

bills fulfilling the conditions of the Bank Act (cf. p. 125ff.). The Reichsbank must redeem its notes in current German coin at the chief office in Berlin immediately on presentation, and in the case of branch establishments as far as their stock of metal and the demand for money allow. The Reichsbank has, furthermore, the right to establish branches anywhere in the Empire; the Bundesrat is authorized to order the establishment of branches in specified places.

The Reichsbank and its branches are, throughout the Empire, free from all income and trade taxes.

When a debtor for a loan on collateral (Lombard loan) is in arrears, the Reichsbank has the right to sell the dead pledge (Faustpfand), without legal authorization or procedure, and to deduct principal, interest, and costs from the proceeds.

On the other hand, a number of special obligations are imposed upon the Reichsbank in addition to the general task of regulating monetary circulation, etc. (cf. p. 304).

In accordance with section 22 of the Bank Act, the Bank is bound to receive, without compensation, payments for the account of the Empire and to make payments to the extent of the Empire's balance. It is also authorized to undertake the same transactions for the states of the Empire. This duty has been extended by section 11 of the Imperial Bank Statute, which provides that the Reichsbank shall administrate gratuitously the balance of the Empire, and shall keep and render accounts of all receipts and payments on the account of the Empire (cf. p. 293).

The business which the Bank is allowed to carry on is It is confined to transactions in precious clearly defined. metals; to the discounting of bills which have at most three months to run and on which, as a rule, three, but at least two, persons known to be solvent are liable; the purchase and sale of bonds of the Empire, of the federal states, and of inland communal corporations, which are due at their face value at the latest in three months; the granting of collateral loans on portable pledges of a prescribed kind; trading in certain absolutely safe German securities; the collection of commercial bills; the purchase and sale for patrons of precious metals and securities; the acceptance of noninterest-bearing and, under certain restrictions, of interest-bearing moneys as deposits and transfer (giro) accounts; the custody and management of articles of value.

Of great importance for the monetary standard is the duty imposed upon the Reichsbank in section 14 of the Bank Act of exchanging its notes for gold bullion at a fixed rate of 1,392 marks for the pound fine. As 1,395 marks are coined out of a pound fine of gold, and the mints, in accordance with the proclamation of the Chancellor of the Empire on June 8, 1875, charge, for the coinage of gold on private accounts, 3 marks per pound fine, the price which the Reichsbank is bound to pay for gold bullion corresponds to the sum for which the mints coin for private persons. At the mints, however, a person delivering gold suffers a loss of interest, as he must wait until the coining is completed; at the Reichsbank, on the contrary, he gets the value in notes immediately. As a result, all gold destined for monetary purposes is in reality delivered to

the Reichsbank, and the Reichsbank is the only private concern which makes use of the free right of coining.

It follows of necessity that the demand for gold for consignments abroad must finally be covered from the bullion of the central bank. Consequently, the widest conceivable control over all international relations of German banking is assured to the Reichsbank by section 14 of the Bank Act. Through this provision, in conjunction with the private coinage right, the standard is connected closely with the Bank administration and the condition of the money market.

Furthermore, the Reichsbank must make known its rate of discount and the rate for loans on collateral (*Lombardzinsfuss*).

It is obliged to take in payment at full nominal value, in Berlin as well as at its branch establishments in towns with over 80,000 inhabitants, or at the seat of the issuing bank, the notes of those banks complying with the optional provisions of the Bank Act, as long as the issuing bank punctually fulfills its duty of redeeming notes. The Reichsbank, however, may make use of these notes only for payments to that bank which has issued them, or for payments in that place where the latter has its head-quarters, or it must present the notes for redemption. The notes of the Reichsbank, on the other hand, may be used at will as payment by private banks of issue (*Privatnotenbanken*).

The Empire, finally, participates in the net profits of the Reichsbank. Concerning the division of the profits, section 24 of the Bank Act provides as follows:

First, a regular dividend of 4½ per cent on the capital stock is paid to the shareholders; then 20 per cent of the

remainder is allotted to the reserve fund, as long as this does not amount to a quarter of the capital stock. The remaining portion is divided equally between the Empire and the shareholders, in so far as the total dividend of the shareholders does not exceed 8 per cent; of the surplus still remaining the shareholders receive one-fourth and the Empire three-fourths.

By the act of December 18, 1889, proposing a change in the Bank Act (cf. Appendix 2), a the initial dividend of the shareholders was reduced to $3\frac{1}{2}$ per cent, corresponding to the general decline of the interest rate of the Empire, and three-fourths of the surplus was allotted to the Empire, provided the total dividend of the shareholders exceeded 6 per cent. a

Section 41 of the Bank Act reserves to the Empire the right either to abolish the Reichsbank (first, on January 1, 1891, then, however, every ten years after a preliminary notice of one year) and to take over its real estate at the book value, or to acquire the total shares of the Reichsbank at their nominal value. In both cases the reserve fund as shown by the balance sheet, in so far as it is not needed for meeting losses, goes in equal portions to the shareholders and the Empire.

For a prolongation of the privileges of the Reichsbank the consent of the Reichstag is necessary.

a See page 445 of the German edition of the Reichsbank volume, also note on page 56 of this translation.

b The Revised Bank Act (Banknovelle) of June 7, 1899, caused a further decrease in the profits of the shareholders. This act provides that after the first dividend of 3½ per cent to the shareholders and the legal portion to the reserve fund, three-fourths of the remaining surplus is to go to the Empire and one-fourth to the shareholders (cf. p. 353).

As the note privilege of those banks which conformed to the optional provisions of the Bank Act—all banks, in fact, except the Braunschweigische Bank—can be revoked at the same time as that of the Reichsbank, legislation has, every ten years, a free hand to adapt the Bank constitution to altered conditions, and to consider any reforms which appear to be necessary or desirable.

THE ESTABLISHMENT OF THE REICHSBANK.

In order to establish the Reichsbank by transforming the Prussian Bank into the form outlined in the Bank Act a number of comprehensive administrative measures were necessary. It was specially important that the Prussian government revoke the privilege of the Prussian Bank and conclude a contract with the Empire.

The privilege of the Prussian Bank was revoked, in view of the pending reorganization of banking affairs, before the end of the year 1871, according to section 2 of the Prussian Bank Act of May 7, 1856. According to the paragraph in question the shareholders were to receive the nominal value of their shares and, in addition, half of the reserve fund; the whole wealth of the Prussian Bank went, on the other hand, to Prussia.

The Prussian Government received authority by a law of March 27, 1875, to conclude with the imperial government a contract concerning the cession of the Bank to the Empire; the necessary authority was accorded to the imperial government in the Bank Act of March 14, 1875. The terms of the contract were fixed by both parties in agreement with those which, during the abovementioned deliberations on the establishment of the Reichsbank, had been proposed to the Bundesrat by the

Prussian Government in November, 1874. The contract concluded between Prussia and the German Empire in accordance with these terms was ratified on May 17–18, 1875. According to this contract the Empire took over the Prussian Bank on January 1, 1876, with all its privileges and duties, in order to transfer them, in accordance with the Bank Act, to the Reichsbank to be established. The cession was made in that the head of the Prussian Bank, on January 1, 1876, assigned in writing the wealth of the latter to the Reichsbank Directorate for further management.

In accordance with the provisions of the contract between the Empire and Prussia, the necessary measures for the establishment of the Reichsbank were provided by the Bank Act and by the statute decreed by the Emperor with the consent of the Bundesrat, in accordance with section 40 of the Bank Act.

The capital stock of the Reichsbank was to be raised from the invested capital of those shareholders of the Prussian Bank who would use the right, reserved to them in the contract with Prussia, of exchanging their shares for shares in the Reichsbank, and further, through the sale of the remainder of the new bank shares by the Chancellor.

Only 81 shares of the Prussian Bank, representing 243,000 marks, made no use of the privilege of exchange. In accordance with the contract with Prussia, the Reichsbank had to pay to the owners of these shares their invested capital and their share of the reserve fund.

Altogether, 20,081 shares, with a total nominal value of 60,243,000 marks, were disposed of—20,000 by public

subscription—through a proclamation of the Chancellor on May 24, 1875, and 81, for which the privilege of exchange had not been used, by sale on the Bourse.

A rate of 130 was obtained in the sale, and the premium, to the total amount of about 18,000,000 marks, was used in paying off the 15,000,000 marks to Prussia in accordance with the surrender contract, the remainder being allotted to the reserve fund.

On December 31, 1875, the funds of the Prussian Bank were transferred to the Reichsbank Directorate by a decree of the Prussian minister of commerce, the former head of the Prussian Bank. On January 1, 1876, the most important features of the new system were put into operation.

THE REICHSBANK AS THE CENTRAL BANK OF GERMANY.

THE BASIS ESTABLISHED BY THE BANK ACT.

In the bank constitution created by the Bank Act of March 14, 1875, the principle of a central bank was established in so far as it could be reconciled with the well-earned rights of the existing 32 private banks of issue (*Privatnotenbanken*).

The predominance of the Reichsbank was assured by its capital, which, in comparison with that of the remaining banks of issue, was extraordinarily large for the existing conditions, and further by the amount of its authorized tax-free note contingent (Notenkontingent), which considerably exceeded the sum of the entire remaining contingents, and which was subsequently to be increased by the contingents of those banks that decided to issue no more notes. In case of a general demand for money the tax on excess notes was no effective restriction to the in-

crease of notes of the Reichsbank beyond its authorized limit, as the Reichsbank did not hesitate to sustain losses through the tax when public interest required an extension of its note emission. The predominance of the Reichsbank was also promoted by its right to establish branches all over the Empire; for private banks of issue the establishment of branches outside their own particular state was coupled with severe conditions.

It was the business of the Reichsbank to put in practice, on this basis, the idea of a German central bank of issue.

Since legislators favored such a development of the Reichsbank, it was in keeping with this fundamental idea to divert private banks of issue from note issues to other branches of banking (viz, deposits), and to urge them to renounce voluntarily their privilege of issuing notes.

Besides, every adequate regulation of conditions for note issue was bound to lead to such a result. The restriction of business to lines compatible with note issues, principally to discounts and loans on collateral, is practicable, without too great a curtailment of financial proceeds, only for a bank resting upon a comparatively This limitation was prescribed, however, broad basis. for all banks which would confine their operations to the particular state which had granted them the concession. Certain facilities were granted only to those banks which would restrict their note issue to the amount of their capital stock. But the limitation of note issues and the confinement to one state deprived the banks in question of all importance as issuing banks in the German monetary system.

The note-tax system helped the intended development in two ways. Banks can not in normal times, when the rate of discount does not rise to 5 per cent, exceed their authorized contingent to any appreciable extent and for any length of time without suffering financial loss; even when the discount rate reaches 5 per cent the banks have no interest in extending their uncovered circulation beyond their contingents, for the interest on notes issued beyond the tax limit is counterbalanced by the 5 per cent tax. Even when higher discount rates prevail, the profit resulting from excess note issues is comparatively small. In consequence of this, the note tax has had the effect, upon the whole, of keeping within limits the uncovered note issue of private issuing banks.

On the other hand, the fact that the entire cash holdings of banks are reckoned as cash reserve in calculating the uncovered note circulation and the note tax, has caused banks to encourage deposits, for the cash from deposits is cover for notes within the meaning of the Bank Act.

DECREASE IN THE NUMBER OF PRIVATE BANKS OF ISSUE.

How far the development contemplated in the German bank constitution has been realized is shown by the fact that of the 32° private banks of issue which existed in 1875 only 7 are still in existence. Even before the Bank Act went into force 12 private banks of issue renounced their privileges. Of the private banks of issue at present existing, only one, the Braunschweigische Bank, has not conformed to the optional provisions of the Bank Act. Its privilege runs until the year 1952.

^bThe Bank of Braunschweig, the Bank of Frankfurt, and the Bank für Süddeutschland no longer issue notes.

a In 1910 only four remained, the Bank of Bavaria, the Bank of Saxony, the Bank of Wurtemberg, and the Bank of Baden.

In Prussia there exists only one bank of issue besides the Reichsbank, namely, the Bank of Frankfurt.^a Whereas all other Prussian private banks of issue have lost their right of issue, either through voluntary renunciation or through the refusal on the part of the Prussian Government to renew the privilege upon its expiral, the privilege of the Frankfurt Bank on account of the competition of the neighboring South German banks of issue was prolonged indefinitely, subject to revocal after one year's notice.

The remaining 5 private banks of issue that have conformed to the regulations of the Bank Act are the following: The Bayerische Notenbank at Munich; the Sächsische Bank at Dresden; the Württembergsche Notenbank at Stuttgart; the Badische Bank at Mannheim; the Bank für Süddeutschland at Darmstadt.

Of these, the two first mentioned have managed to keep a comparatively exclusive field of activity, and have established a large network of branches, which, however, have been confined to the one state.

Through the renunciation by 25 private banks of issue the note contingent (authorized tax-free note issue) of the Reichsbank has gradually been increased from 250,000,000 marks to 293,400,000 marks, b while the sum total of the contingents of the private banks of issue amounts now to only 91,600,000 marks.

^a The Bank of Braunschweig, the Bank of Frankfurt, and the Bank für Süddeutschland no longer issue notes.

^b By the Revised Bank Act of June 7, 1899, it has been raised to 450,000,000 (cf. p. 346), and by the Act of June 1, 1909, to 550,000,000, with an aggregate circulation of 618,000,000 marks, except at the end of March, June, September, and December, when the contingent of the Reichsbank is raised to 750,000,000, and the aggregate circulation to 818,771,000 marks.

THE EXTENSION OF THE REICHSBANK'S SYSTEM OF BRANCHES.

More important for the Reichsbank than this increase was the immediate extension of its branches over all Germany. How great was the need outside Prussia for connection with a central bank is shown by the many petitions received in 1875 by the Prussian Bank from the provinces, especially from Saxony. These petitions desired the establishment of branches before the new bank constitution went into force. The same law of March 27, 1875, which empowered the Prussian Government to surrender its bank, gave to the Prussian Bank, which had formerly established branches by virtue of special laws only in Alsace, Lorraine, and Bremen, the right to establish branches over the entire Empire during the short time which it still had to exist as Prussian Bank, and use was at once made of this authority, not only for Saxony but also for Hessen, Baden, Brunswick, and Reuss a. L. After January 1, 1876, the remainder of Germany was included.

Of distinct importance, however, for the position of the Reichsbank in the German banking system is the fact that private banks of issue have, according to their management, ceased more and more to exercise a determining influence on the regulation of monetary affairs and on the international relations of our monetary system. The fulfillment of these important tasks became more and more a duty of the Reichsbank. THE REICHSBANK AS THE LAST RESORT OF THE GERMAN MONETARY SYSTEM.

The Reichsbank is the last support of the German home market. It satisfies out of its own funds every increased demand for money by increasing its note emission, even when this largely exceeds its tax-free contingent; on the other hand, it regulates the demand for money and counteracts too great an extension of note circulation by fixing the discount rate. It neither depends on other banks nor does it rediscount bills—as do private banks of issue—for the purpose of diminishing its capital invested in bills and strengthening its funds by claims on third parties.

In the same way, the supervision of foreign relations of German monetary affairs lies exclusively in the hands of the Reichsbank. It endeavors to hold a sufficient gold reserve, out of which at all times foreign obligations can be settled without causing a shock to our standard.

In consequence of the provision of the Bank Act concerning the purchase of gold, the gold coming from abroad flows principally into the Reichsbank. By fixing its discount rate, the Reichsbank exercises on domestic demands for credit and on international gold movements a certain steadying influence. This was formally recognized by the private banks of issue as early as 1887 by an agreement in which they bound themselves not to discount a at a rate lower than that of the Reichsbank, as soon as the Reichsbank gives notice of a threatened draining of gold.

How the Reichsbank has sought to solve its problems in detail will be described in the following pages.

 $[^]a$ Cf. art. 7 of the Revised Bank Act of June 7, 1899.

CHAPTER II.

THE ADMINISTRATIVE ORGANIZATION.

THE ORGANIZATION IN GENERAL.

The well-tested administrative organization of the Prussian Bank was retained in its salient features upon the establishment of the Reichsbank. The deviations to suit altered circumstances were mainly of a purely formal nature and only in isolated instances of material importance.

At the head of the Reichsbank stands the Chancellor of the Empire, who directs the whole bank management according to the provisions of the Bank Act and the Bank Statute. He is invested not only with important special powers which the act enumerates, particularly in the authority to issue orders and official instructions for the conduct of business, but also in the general provision that the Reichsbank Direktorium, which is directly under the Chancellor, must at all times obey his orders. He is president of the *Curatorium*, which supervises the Reichsbank on behalf of the Empire. In case of the Chancellor's unavoidable absence, he is represented in all functions affecting the Reichsbank by a substitute appointed by the Emperor.

The Reichsbank Direktorium, which, under the Chancellor, has immediate control of the Reichsbank, is designated in the Bank Act as the managing and executive body. Its members are the official representatives of the

Reichsbank. It is endowed with special independent powers, even though these can be checked by higher officials; it acts in its own name as the central managing body of the Reichsbank, forms its resolutions on its own responsibility by majority vote, and has the rights of a "supreme imperial board" (oberste Reichsbehörde).

The branches of the Bank, on the other hand, are not invested with independent legal power and authority. The Reichsbank is, to be sure, bound just as much by the regular signature of the principal branch offices (Reichsbankhauptstellen) and of other branch offices (Reichsbankstellen), within their field of business, as by that of the Reichsbank Direktorium, even where the laws require a special authorization (Bank Act, section 38, proclamation of the Chancellor of the Empire on December 27, 1875); but this right is only a derived one, and nothing more than a legal power of attorney. Only in the case of the head office in Berlin and its circuit has this right not been transferred. Here the Reichsbank Directorate combines two different functions—the general management of the Reichsbank and the local direction of the Berlin office.

THE MAIN BANK.

The activity of the Reichsbank Direktorium as head of the central administration for the whole Bank is shown not only in its supervision, its official instructions, its business rules conforming with the laws, ordinances, and directions of the Chancellor, but also in its responsible general management of the business itself. All transactions of the Reichsbank as a whole, and, furthermore, all transactions of greater importance which do not fall within the scope of ordinary business as defined in the official instructions, are reserved to the Direktorium; many other matters carried out by branch offices require the consent of the Direktorium in each particular case. The branch institutions, even when endowed with independent powers, are under the supervision of the central board, which is constantly kept informed about the business by means of reports and statements, and convinces itself of their correctness through special reports and revisions.

The Reichsbank Direktorium is a board with a president, since 1887 also a vice-president, and six other members. The president and members of the Direktorium are appointed for life by the Emperor upon nomination by the Bundesrat, the members after approval by the central committee (Zentralausschuss). The salaries and pensions of the Directorate are determined annually in the imperial budget.

By combining the functions of the central administrative office with the business direction for the Berlin bank circuit the Directorate is in close contact with commercial life and technical administration. This purpose is furthered by two special arrangements, which are calculated to procure for the central board trustworthy information, based on independent observations by special Reichsbank officers, regarding the general business situation within the various bank circuits. First, reports on the condition of commerce and industry are made twice a year to the president of the Direktorium by the independent branch establishments and once a year by the subordinate branch offices; secondly, annual conferences of provincial

branch directors are held in various towns under the chairmanship of the president, and here discussions follow concerning the general state of business and credit, and the proposed changes in the administrative and technical organization.

The main Reichsbank office, in which central and local functions—the latter limited to the Berlin circuit—are combined, is organized into the following bureaus: The central bureau (Zentralbüreau), comprising the department of the president; the main bookkeeping office (Hauptbuchhalterei), which controls the bookkeeping of all branches, settles the accounts of branches with one another, collects all booked material, makes the final entries on the different accounts, draws up the weekly reports, and at the end of the year prepares the balance sheet: the archives (Archiv), which keep the books relating to bank shares; the statistical department (Statistische Abteilung), in which all statistics of any importance to the bank management are collected and arranged; the Reichsbank main treasury (Reichsbankhauptkasse), which is also charged with the care of the monetary transactions of the imperial treasury under the title of main imperial treasury (Reichshauptkasse); the transfer (Giro), discount, and collateral loan (Lombard) departments; the collateral loan (Lombard) control office; the bureau for private closed deposits; lastly, the registration office (Registratur), and the copying office (Kanzlei).

^a As the separate reports of the branches, in order to give an accurate picture of the situation, are made up simultaneously—in contrast to the procedure in other large central banks of issue—the compilation and publication of the returns for the whole Reichsbank can, on account of the great distance of many branches from Berlin, take place only after the lapse of several days after the closing of the books.

A peculiarity in the administrative system is the securities department of the Reichsbank main office (Kontor der Reichsbauptbank für Wertpapiere, cf. p. 324ff.).

A special auditing official has to receive all accounts of the Reichsbank, check them, and forward them to the board of accountants (*Rechnungshof*) of the German Empire, which then revises them according to section 29 of the Bank Act.

BRANCH ESTABLISHMENTS.

The centralization of bank note issues aimed at by the Bank Act—a centralization which in the course of time has really come about in many parts of Germany through the disappearance of most banks of issue—presupposes for the Reichsbank an extended and well organized system of branches, so that it can fulfill its legal duties and satisfy the rightful claims of trade to a metal and note circulation suited to times and local requirements. The Bank Act gave the Reichsbank the right "to establish branches in all parts of the Empire," and empowered the Bundesrat to order branches to be established in certain places (sec. 12). The Reichsbank at its establishment needed only to extend the Prussian Bank's network of branches over the whole Empire, and to arrange the network according to the development of commerce.

INTERNAL ORGANIZATION.

This applied above all to the internal organization of the branches of the Prussian Bank. The main branches (Reichsbankhauptstellen), branch offices (Reichsbankstellen), suboffices (Reichsbanknebenstellen), and warehouses (Warendepots) correspond to the Bankkontoren, Bankkonmanditen, Agenturen, and Warendepots of the Prussian Bank. The past twenty-five years have caused no essential changes in the old and tried organization except in the case of suboffices (Nebenstellen).

No important differences exist between the Reichsbankhauptstellen and the Reichsbankstellen, which by virtue of their rights are called in the official language by the common name "independent branch establishments" (selbstständige Bankanstalten). They are empowered to carry on independently in the district assigned to them by the Reichsbank Directorate all forms of business to which the Reichsbank is entitled in accordance with section 13 of the Bank Act. Their importance is therefore that of commercial branch establishments, but only in an economic Legally their constitution is specially arranged. Corresponding to their purpose of doing business independently, they possess with regard to external affairs unlimited rights of representing the Reichsbank. nally, they are parts of the Reichsbank system and are in direct connection with one another, although they do not settle accounts directly with one another. This takes place solely through the main bank. Each branch is put in charge of two managing officials. The independent branches must obtain the signatures of these officials, or of others appointed as their deputies, in order to bind the Reichsbank legally.

Each main branch (Reichsbankhaupstelle) is under the supervision of a commissioner appointed by the Emperor. Justiciaries, who exercise nearly the same functions, are appointed for the branches (*Reichsbankstellen*). Moreover, the main branches are distinguished from branches by the fact that the main branches have district committees (*Bezirksausschüsse*) selected from the shareholders in accordance with section 36.

In only one respect are branches linked within circuits to the main branches; in the determination of large normal credits for the more important firms in the circuit of the branch, a certain cooperation with the deputies of the main branch takes place (cf. p. 129).

The suboffices (Reichsbanknebenstellen) form the lowest instance of the Bank's organism, and are directly subordinated not to the Reichsbank Directorate but to the independent branches. Their purpose is to conduct within their respective circuits such business as is allowed to the Reichsbank; but their field of operation is limited to their district, when nothing to the contrary is expressly arranged, so that their work consists only of purely local business. Above all, however, they are completely dependent on the branches immediately above them—first, because they stand, as a rule, in immediate official connection and on clearing-house terms only with the higher • branch office, and secondly because their transactions are directly subject to the approval of the higher office. Their intermediary activity finds expression in the fact that no bill may be purchased by them which has not been previously laid before the higher office and accepted by the same for discount. This rule has gradually been mitigated so that the higher branch can name to the suboffice those persons and business houses from whom,

without inquiry in each case, bills may be purchased within the fixed limits of credit, with the reservation, however, that sanction may subsequently be refused.

Suboffices have been completely dependent throughout the past twenty-five years, though their powers have been extended in many particulars. These extensions were the necessary result of the perfection and popularization of arrangements with the Reichsbank, also of the increasing requirements of economic development, but, above all, of changes in the organization of the staff.

One of the chief obstacles to the free development of suboffices was the necessity of limiting cash reserves to a certain amount for the sake of safety. Wherever one officer managed the business, only small balances could be kept on hand, determined by the amount of security deposited by the official. In consequence of this, requests of the commercial world for an extension of business could be treated only with a certain amount of caution, as otherwise considerable sums might be sent back and forth too frequently. For similar reasons the suboffices could not be permitted to accept closed deposits nor to accept and manage collateral on loans (lombardierte Effecte), however desirable this might appear in the interest of the public. Where, however, the volume of local business justified the appointment of a second official, these considerations could, by virtue of the greater safety thus guaranteed, be overlooked.

Similarly another circumstance stood in the way of a more rapid development. At the creation of the Reichsbank most of the directors of suboffices were not officials trained in banking, but agents, some of whom performed the duties of the office only as incidental work and received for it no fixed salary, but only a percentage of the profits. It was not always possible to require of them, without further ado, additional work in branches of business which yielded no immediate profit—a consideration which disappeared when the Bank, with increasing trade, proceeded to replace gradually most of the agents by trained officials receiving a fixed salary. Naturally the Reichsbank was also obliged, before it decided upon innovations in suboffices, to await the lessons of experience in order to form an opinion as to whether the existing arrangements were adequate to meet the new demands.

Only in the course of development, therefore, could the Reichsbank make use of its suboffices for the exercise of important functions, such as transfer transactions (*Giroverkehr*), the cashing of interest coupons, and business with the treasuries of the different states.

Such a development took place in the case of most suboffices and led to the establishment of the preponderating and normal type managed by one official and termed suboffice with a cash- and limited transferdepartment (Nebenstelle mit Kasseneinrichtung und beschränktem Giroverkehr). The activity of the few suboffices without cash departments is confined now, as formerly, to the purchase of bills and to loans on collateral. It is to be noted, however, that in the meantime many of them have received cash departments, and have therefore entered the first-mentioned category.

But the powers which could be granted to all suboffices possessing cash departments were not sufficient

where the business was especially extensive. Since 1883 the Reichsbank created as an experiment, in a number of such places, a new form of Reichsbank suboffices managed by two officials (Reichsbanknebenstellen mit zwei Vorstandsbeamten). This new form had not only a complete transfer department as conducted by independent branches, but also more independent departments for collateral loans, sealed deposits, and increased cash reserves. Since the middle of the nineties, however, the Reichsbank has, after several unfavorable experiences, given up this plan, and has no longer appointed two officials for suboffices in places with extended business. but has left the management to one director and given him one or more assistants intrusted specially with the management of the cash. Similar powers could be assigned to these suboffices. Their extended transfer system (erweiterter Giroverkehr) is nearly equal to that of the independent branches. Only in official transactions are a few restrictions still enforced with respect to transfers, but these restrictions are no longer perceptible to the business world. Also in other branches of banking, as loans on collateral and sealed deposits, extended powers could be granted to them, yet the Reichsbank has always avoided general schemes and has always been guided by local requirements. This new form of suboffice in places with extended business has prevented a further increase of suboffices with two managing officials. The latter have, for the most part, been transformed into independent branches. The last one, that in Heilbronn, was changed in 1900 into a suboffice with extended transfer facilities.

The subordinate branch establishments (Kommanditen) at Coeslin, Insterburg, and Stolp, which were taken unaltered from the Prussian Bank, were similar to suboffices with two managing officials. In consideration of local requirements and wishes these institutions, which were endowed with somewhat greater powers, had not been transformed into ordinary suboffices; on the other hand, their business was not yet considerable enough to justify their conversion into an independent branch. This transformation took place later, at Stolp in 1877, at Coeslin in 1899, and in Insterburg in 1900.

The independent branches of Trier, Marienwerder, and Saarbrücken, which until 1891, 1892, and 1890 had been managed either by the local Prussian government treasuries (*Regierungshauptkassen*) or the Royal Mining Directorate (*königliche Bergwerks-Direction*), were relics of the old administrative organization of the Prussian Bank.

Accordingly the Reichsbank has to-day only three kinds of suboffices—first, those having one manager; secondly, those with one manager and one or more assistants (suboffices with limited and suboffices with extended transfer systems); and thirdly, those without a cash department (Kasseneinrichtung).

Here must be mentioned, as branch institutions connected with main branches and branches, the few warehouses (*Warendepots*) existing only in the northern and eastern Prussian provinces, which serve practically only in the preparation and transaction of loans on collateral (cf. p. 181).

TERRITORIAL DIVISION.

The exterior organization of the Reichsbank—i. e., the distribution of its branch establishments over the whole Empire—was given largely by the Prussian Bank. Almost all necessary changes were results of the extension of the system over the whole Empire, and even here the Prussian Bank had prepared the way for its successor, inasmuch as it had opened branch offices in many places before 1875, and especially in this very year, in view of the coming transformation. These branches were in Alsace-Lorraine, Saxony, Baden, Hesse, Brunswick, Reuss a. L., and Bremen.

The main branches (Reichsbankhauptstellen) are established by the Bundesrat on the motion of the Chancellor of the Empire. According to the express provision of the law, they are established only in large places. It was planned that each large federal state and each Prussian province have a main branch. The Prussian Bank's branches established on the same principle were accordingly transformed into main branches, only with this difference, that, on account of the volume of business, Dortmund received a main branch in place of Münster, and Hamburg in place of Altona. The province of Schleswig-Holstein, where business was at that time hardly developed, got no main branch of its own, but was linked to that of Hamburg. In the remaining states the cities of Munich, Leipzig, Stuttgart, Mannheim, Bremen, and Strassburg were decided upon as locations of main branches. For the same reasons the independent branch in Danzig was transformed into a main branch in 1879,

after the division of the province of Prussia into East and West Prussia.

The establishment of branches takes place through the Chancellor of the Empire, ordinarily on the motion of the Reichsbank Directorate, but for this the law lays down no special requirements. Since the completion of a system of branches comprising the whole German Empire, new branches have come into existence only through the transformation of suboffices. because in places where there had been no banks, suboffices have always first been established in accordance with the volume of business. The importance of the place itself is the first consideration for such a conversion; but the most decisive factor is the size of the circuit and the extent of the business of the independent branch to which the suboffice was previously subordinate. In numerous circuits the business of the Reichsbank has increased in the course of time, and the work has become so important that the independent branches find it more difficult to supervise their own immediate circuit and their thriving and ever-increasing suboffices. In certain cases a division of a district which has become too large is absolutely necessary on account of the complicated district credit system, which requires careful watching by the Reichsbank. At the establishment of the Reichsbank the existing independent branches (Kommanditen) of the Prussian Bank were taken over as Reichsbankstellen; several new ones were also founded. In the course of twenty-five years, apart from the branches established in 1876, there have been added those in Stolp (1877), Cottbus (1883), Coeslin (1889), Duisburg (1892),

Wiesbaden (1894), Bochum (1896), Darmstadt (1897), Plauen (1897), Hildesheim, Ulm (1898), Freiburg (1899), Schweidnitz, Allenstein, Insterburg, Barmen, and Fulda (1900).

The division, which in 1876 appeared fully justified and sufficient, was no longer so in later years. It is evident that the ever-increasing burdens caused in many branches by the growth of population and business were especially felt in prosperous times. This found expression in the great amount of business and the large profits of some of the bank circuits. The later years, therefore, of this economic rise have caused changes in the territorial organization of the independent branches. Whereas in the first half of the quarter century the number of independent branches increased by only two, no less than 14 were added in the second half, of which 11 were added in the last five years.

The establishment of suboffices is solely the business of the Reichsbank Directorate; it takes place whenever there is a demand. It is not always possible to determine whether and in what way the business at the new suboffice will develop. In consideration of the high cost for establishment and maintenance, and in order to test the question of necessity—a question too readily answered in the affirmative by the most influential circles of the particular town—the Reichsbank Directorate has hitherto always required in doubtful cases the fulfillment of certain conditions by the municipal authorities or the business circles. These conditions are, however, of a temporary character; they are usually imposed only for a certain

number of years, and disappear as soon as the vitality of the suboffice has been demonstrated.

One hundred and thirty subordinate institutionsdependent branches (Kommanditen), agencies, and goods depots—were taken over from the Prussian Bank, and 17 new ones founded shortly afterwards, in the year 1876: in the first years, they did not increase uninterruptedly. Here and there suboffices, but principally goods depots the business of which did not develop in the expected way, have been discontinued since then.a Thus their number increased by only 25 in the twelve years after 1876, but the increase was all the greater in the next twelve years. At the end of 1900 the Reichsbank had 255 subordinate branches against 147 in the year 1876 and 172 at the end of 1888, a result all the more noteworthy when one remembers that the number of goods depots decreased from 27 to 14, that 16 suboffices (Nebenstellen) became independent branches (Reichsbanktellen), and 43 were given the extended transfer department (Giroverkehr). The ever-growing importance of suboffices, resulting from the extension of their powers, is shown by the fact that their increase has been more rapid than that of independent branches; whereas at the end of 1876 the proportion between suboffices and the independent branches was 2.49:1, at the end of 1888 it was 2.82:1, and at the end of 1900, 3.4:1.

The increase of branches is not only absolute, since their number rose from 206 (1876) to 330 b (1900) while the size

^aThe tables referred to in this English translation are contained in the original German volume published in Berlin in 1900. The National Monetary Commission has prepared a volume of statistics for Germany which include Reichsbank statistics for more recent years.

bIn 1909 there were 493 branches.

of the Empire remained the same, but also relative to population. Their increase has taken place at a more rapid rate than has population; at the end of 1876 there was I branch to 209,000 inhabitants, at the end of 1900, I to 170,000, a sign of the increased activity of the Bank, due to changes in German economic life and to flourishing industry and commerce.

The density of population and the economic condition of the various districts have been of importance in the territorial distribution of Reichsbank branches. In thickly populated, highly developed regions the branches are closer together than in agricultural districts. Bank districts are much smaller, therefore, in commercial and industrial districts. If the average size of each of the 76 bank circuits is 7,114 square kilometers, nearly all the industrial and commercial districts fall below this average. This is all the more striking if one takes into consideration that the districts of important branches, such as Leipzig, Essen, Dortmund, and Chemnitz, are very small. The five smallest districts are highly developed centres of industry, namely, Bochum, Elberfeld, Düsseldorf, Barmen, and Duisburg, with areas of less than 1,000 square Yet not one of these institutions is to be kilometers. regarded as small; they are of commercial importance and do a considerable business. The largest districts are those of the branches in Munich, Nürenberg, Posen, Lübeck, Stettin, Berlin, Hamburg, and Breslau. In the case of the Bayarian branches at Munich and Nürenberg, the districts are large, because there is no sufficient demand for the establishment of a Reichsbank branch,

since the Bayerische Notenbank has had for a long time past an extended network of branches.^a The extraordinary differences in the territorial distribution of branches are striking when one compares the area of the largest bank circuit, Munich, amounting to 29,607 square kilometers, with the smallest, that of Bochum, comprising 120 square kilometers.

The differences with respect to the number of inhabitants are by no means so considerable. The Berlin district, which is sixth in area, is naturally first in population, with 3,044,000 inhabitants, whereas the smallest district, Memel, has only 95,000. But here again the industrial districts are below the average—an instance of how much more the services of the Reichsbank are claimed in these places by the people.

THE SYSTEM OF CONTROL.

The Reichsbank has always laid great stress on an organized system of control, for the valuable papers and the large amounts of cash which pass through its numerous offices, or are stored and managed in its vaults and safes, make special precautions necessary, partly to avoid false and erroneous entries, partly to guard against embezzlements. In the course of development the measures of control employed by the Reichsbank have been subjected to various changes.

The measures for control include the checking of entries and of actual valuables on hand, and, finally, the testing of calculated and actual assets.

 $^{^{}a}$ At the end of 1900 the Bayerische Notenbank had 6 branches and 53 agencies.

The system of control is organized with special detail for suboffices managed by only one official. In larger branches, control is easier through the presence of several officers. Herein lies an important element of safety, not only with regard to amounts on hand, but also with regard to bookkeeping. The Bank's own tried system of bookkeeping is trustworthy, for all books are doubly kept by different officers.

A constant control by responsible officials is possible through numerous returns comprising the whole business of the Bank. Independent branches send their returns at stated intervals, usually on the last day of the week or month, directly to the main bank, where they are examined in the head bookkeeping office (Hauptbuchhalterei). They afford the central management at all times an exact and detailed survey, not only of transactions but also of the balance on hand according to the books. The branches exercise a certain independent control through direct correspondence necessitated by current transactions.

The control of suboffices, in accordance with their organization, lies entirely in the hands of the superior independent offices, but here the reports are not confined to periodical statements; suboffices report to the superior bank office, every evening at the close of business, all transactions together with detailed abstracts from their books.

Examinations (*Revisionen*) form another important means of control. In the first place, these determine whether the calculated assets as shown by the books and correspondence of the various branches agree with the

actual assets. In the case of independent branches, examinations take place regularly every month; special examinations are ordered from time to time by the president of the Reichsbank Directorate. It is in keeping with the purpose and nature of special examinations that the offices to be examined be kept in complete ignorance concerning the date. Examinations take place simultaneously at the main bank and all independent branches. At the main bank they are undertaken by members of the Reichsbank Directorate with the cooperation of the deputies of the central committee, at the head branches by the commissioner with the aid of the assistants (Beigeordneten), at the other independent offices by a justiciary. At suboffices only extraordinary examinations take place, but these are held several times in the year; they are ordered by the superior branch office, and are, as a rule, undertaken by one of the two managers. determination of the number and time of these examinations is incumbent upon the managers of the superior branch office.

In addition to these, other examinations are held from time to time by members of the Reichsbank Directorate.

The interested public exercises an independent public control over the business management of the Bank, for example, through the entries in the transfer account books and on collateral loan certificates. The public is also a medium of control in distance transfers, as it is universally customary in the business world that the sender of a remittance inform the receiver. Only in the case of suboffices are special measures prescribed by the Reichsbank for its clients for the purpose of bringing

about a public control. In cases of loss the Reichsbank recognizes the validity of larger payments to suboffices only when the depositor has informed the superior branch office immediately upon completion of the payment. This announcement is required only in certain kinds of payments, according to the conditions governing the different branches.

THE STAFF.

LEGAL STATUS.

Corresponding to the character of the Reichsbank as an imperial institution, the rights and duties of civil servants are expressly conferred upon its officers by the Bank Act (sec. 28). All legal rights of the latter, especially the law of March 31, 1873 on the legal status of civil servants, are therefore applicable to the staff of the Reichsbank. All questions of pension and provision for widows and orphans are settled beyond possibility of doubt by several imperial decrees (December 23, 1875, March 31, 1880, June 8, 1881, June 20, 1886, March 18, 1888, and July 26, 1897). Owing to special points in the business management of the Reichsbank, particularly with regard to the security required from officials, departures from the general law were necessary. Special regulations for Reichsbank officials were embodied in the aforementioned ordinances of December 22, 1875, and March 31, 1880. It is of special importance, however, that the law of February 20, 1898, relieving civil servants from the necessity of depositing security, is not applicable to the staff of the Reichsbank (sec. 3). All these ordinances, the contents of which refer to laws, are to be regarded as subsequent interpolations in the Bank Statute and decreed on the basis of the Bank Act

(sec. 40). The staff have received thereby a position guaranteed not merely by contract but by law. On the other hand they are subjected to the provisions of the imperial penal law and to the imperial authorities.

With the exception of the president, vice-president, members of the Reichsbank Directorate (cf. p. 26), and commissioners of the head branches (cf. pp. 47 and 64)—all of whom the Emperor appoints—the Reichsbank officials, in accordance with the ordinance of December 19, 1875, are appointed through the Chancellor, or by virtue of authority granted by the latter, through the president of the Reichsbank Directorate, which is designated as the superior official board of the staff (vorgesetzte Dienstbehörde), and exercises the corresponding rights of supervision and discipline. This authorization is conferred by the Chancellor's decree of November 8, 1875, and has reference to all officials with the exception of the highest managing officials of the head branches of the Reichsbank.

PREPARATORY TRAINING AND CLASSIFICATION.

The staff of the Reichsbank has been drawn for the most part from the ranks of tradespeople, in the lower grades also from enlisted men entitled to civil employment. In the case of the former, the condition for employment in the Bank is a certificate of graduation from a *Gymnasium*, a *Realgymnasium*, an *Oberrealschule*, or proof of an equivalent training at some other higher educational institution. The applicant must have learned routine in a bank or in some other reputable business house and must have been employed in such as a clerk. The candidate, who is first sworn in, is accepted by the Bank only

after a three months' trial and an examination held at the end of the three months. Such soldiers as have claims to civil employment (Militäranwärter) are employed, under certain necessary conditions, in the calculation, record, and copying departments, also as tellers and messengers (Kassendiener), in accordance with the "Regulations for filling with military claimants, vacancies in inferior and subordinate positions in the Empire and State" sanctioned by a general cabinet order on September 10, 1882. For all other positions only persons with a business and technical training are considered.

The two managers at the head of each independent branch are jointly intrusted with directing the business and supervising the subordinate officers; they sign in the name of the branch all documents, returns, letters, and negotiations in rough and final copy. The first managing official (bank director) is especially responsible for the orderly conduct of business; he distributes the work among the clerks in accordance with the regulations decreed or sanctioned by the Reichsbank Directorate for all branches, but he can also require the staff to render any necessary temporary help in other branches of business. The second managing official is the regular representative of the first, and his assent is necessary in all important trans-At smaller branches he also does the work of the cashier. The executive officers are represented in case of inability to attend by one of the other older officers (cashier or bookkeeper). At the larger main branches a permanent substitute is at hand in the person of the socalled third officer. According to the size of the branch, one or more cashiers are employed. The books are kept

by bookkeeping officers, consisting of chief bookkeepers and bookkeepers, bookkeepers' assistants and clerks employed by the day.

The suboffices are under the management of a bank committee (Bankvorstand), assisted by one or more bookkeeping clerks, one of whom may have charge of the cash. The "bank managers" are either officers trained by the Bank itself and employed by it in other positions or they are agents trained in business. The agents are also civil servants. They do not, however, draw a fixed salary, but percentages of the profits of the suboffice. They are not permanently engaged. The Reichsbank and the agents may terminate engagements after due notice.

The commissioners and justiciaries appointed to independent branches are expected not only to conduct examinations ordered by the Reichsbank Directorate, but to render assistance to the executive officers in all important matters, especially in legal questions. They also adjust, if possible, any differences of opinion between the various members of the staff, or bring the matter to the notice of the Reichsbank Directorate. They are practical jurists, as a rule higher judicial officials, attorneys, and administrative officers, whose functions in connection with the Reichsbank are only incidental.

The organization of the staff at the main office corresponds in all essentials to that at the branches, but with numerous modifications, due to the differences in the organization of the head office (pp. 44 and 45). In consequence of special bureaus in charge of special managers, and of the central administration system, several categories of officers are found at the branches only in isolated cases.

SALARIES AND OTHER EMOLUMENTS.

Salaries and other allowances, also pensions and maintenance of those dependent on a deceased officer, are paid by the Reichsbank. The salary and pensions of the Reichsbank Directorate appear annually in the imperial budget. That of the other officers is fixed by the Emperor, in agreement with the Bundesrat, on the motion of the Chancellor (Bank Act, sec. 28, par. 2). The salaries of Reichsbank officers, as in the case of all civil servants at present, are graded according to years of service. All other emoluments, especially traveling allowances, are subject to the general rules for civil servants. Fixed allowances for rent are granted instead of extra allowances for dwellings. These are determined according to similar rules.

SPECIAL REGULATIONS.

In accordance with a long-tried arrangement adopted from the Prussian Bank, a certain "percentage" of the profits is given to the responsible managers of independent branches, but not to members of the Reichsbank Directorate. This arrangement aims at the largest possible growth of business, by means of a certain direct interest in the financial proceeds. On the other hand, it is a guarantee that only good and safe transactions will be entered into, since the percentages are not paid in cash to those entitled to them, but are saved and invested at interest in accordance with the rules of the Directorate. This is a constantly growing guarantee fund, and is security for any losses arising at the branch through lack of prudence or circumspection on the part of the officials. According to the decision of the Directorate, officers have

the right to appeal to the Chancellor, but they have no recourse to law. The "percentage fund" is regarded as a part of the official security. The money is handed to the person entitled to it only when, after expiry of his term of office, no losses covered by his share of the "percentages" can arise.

The duties of the Reichsbank officials, so far as they are of a general nature, are regulated by the laws and ordinances applying to all civil servants; the special duties pertaining to the management of the Reichsbank are regulated by instructions from the Chancellor and by the orders of the Reichsbank Directorate. Here may be mentioned the special prohibition—already existing in the Prussian Bank—against speculating on the Bourse, the infringement of which is threatened with severe punishment. There is, as in the Prussian Bank, the regulation that no officer of the Reichsbank may own its shares (Bank Act, sec. 28), in contrast to most private companies, in the statutes of which the higher officials are required to own a number of the shares.

At the establishment of the Reichsbank the officers of the Prussian Bank were taken over with it. The extension of business over the whole Empire naturally resulted in a considerable increase of the staff (cf. Table 2). In the first year 327 employees were added to the 767 taken over from the Prussian Bank.

With the growing importance of the Reichsbank and the increase of its branches, the official staff has constantly increased. The total number of its officers and employees was 1,094 at the end of 1876, as compared with 2,322 at the end of 1900, an increase of 112 per cent.

The increase took place mainly during the second half of the twenty-five years. It amounted between the end of 1876 and the end of 1888 to 298, on an average 25 each year, as compared with 930 from 1888 to 1900, or 77 a year; and of these, 503, or 100 a year, belong to the years since 1895, a period of extraordinary commercial activity and unusual increase in routine work. The main bank had 307 of all the officers at the end of 1876, and 664 at the end of 1900; the branches had 787 in 1876, 1,658 in 1900. In the twenty-five years the main bank had on an average 29 per cent, the branches 71 per cent. The increase has been fairly equal in both cases—at the main bank from 307 to 664, or 116 per cent; at the branches from 787 to 1,658, or 111 per cent.

Of the Bank's employees, 82 per cent on an average appeared in the budget; 18 per cent represented the other employees. The latter comprise those paid by the day, furthermore, the special assistants and assistant messengers, who are employed temporarily or on trial with a view to future permanent employment in the Bank proper, also agents at suboffices and managers of warehouses. The Bank also employs, either at a fixed salary or by the day, numerous men and women to attend to the heating, lighting, and cleaning of the offices.

CHAPTER III.

NOTE ISSUE.

NOTES THE MOST IMPORTANT LIABILITY OF THE REICHS-BANK.

Bank notes are the most important liabilities of the Reichsbank. Through these the Bank receives its special character, with these all other liabilities are connected, and by these the assets are determined.

The right to issue notes is a privilege which has given rise to the exhaustive legal provisions regulating the Bank's business activity and to the participation of the Empire in the administration and in the division of the net proceeds. The fact that bank notes are obligations which fall due daily and have the same importance for the national economic system makes them closely related to transfer accounts (Giroguthaben). Transfers, which, next to notes, are the most important liabilities of the Reichsbank, have thus been stimulated and materially increased. If bank notes are to fulfill their functions and not cause more harm than good, it is necessary that banks employ only for short credit the notes issued in excess of their stock of metal, so that a quick reflux of funds from their investment will meet demand liabilities. this reason the Bank Act restricts the assets of the Reichsbank to short-term grants of credit.

The economic importance of the Reichsbank, like its constitution and its business activity, depends in the first place on the right to issue notes. This right puts the Bank in a position to adapt, within certain limits, the monetary circulation to the fluctuating demands for money; it makes the Bank the last source of money for the German economic system, gives it a certain influence over the money market and its transactions, and enables it to regulate both the domestic and the foreign demands on the German monetary system.

LEGAL REGULATIONS CONCERNING NOTE ISSUES OF THE REICHSBANK.

The note issue of the Reichsbank is regulated by the Bank Act of March 14, 1875, as follows:

INDIRECT LIMITATIONS OF NOTES.

The Reichsbank has the right to issue bank notes according to the requirements of its business (sec. 16). An indirect limitation of this right exists, however, in the above-mentioned (p. 22) system of indirect contingents, according to which the Reichsbank has to pay to the Empire an annual tax of 5 per cent (secs. 9 and 10) on any issue exceeding its cash holdings (Barvorrata) by more than a certain sum (at first 250,000,000 marks), furthermore, in the so-called "one-third cover," i. e., the rule that for at least one-third of the amount of notes issued, a balance of current German coin, imperial treasury notes, gold bullion, or foreign coin must be held (sec. 17).

The object of these restrictions is to force the Bank to maintain a sound proportion between cash holdings and circulating notes, thus to prevent too large an increase of uncovered notes, and to insure the redemption of the notes.

National Monetary Commission

REGULATIONS CONCERNING THE ACCEPTANCE OF BANK NOTES AS A MEDIUM OF PAYMENT.

The same purpose of securing redemption of notes is the cause for the regulation that note circulation in excess of cash reserve must be covered by discounted bills (sec. 17), maturing at least in three months, on which, as a rule, three, but at least two, parties are liable.

The notes of the Reichsbank are not legal tender any more than the notes of private banks of issue. The regulation in section 2 of the Bank Act applies to all German bank notes, viz, "there exists no obligation to accept bank notes for payments which must legally be made in coin. and such obligation can not be imposed on public treasuries by law of the land." The imperial and state treasuries, however, have been officially instructed to accept notes of the Reichsbank in payment. In addition, every bank is bound to accept its own notes for payment at full face value, both at the head office and at the branches (sec. 4). Those banks, moreover, which have accepted the optional provisions of the Bank Act must accept for payment at their head offices and at branches in towns of more than 80,000 all German bank notes which are allowed to circulate in the whole Empire; but while they are allowed to present notes of private banks of issue only for redemption or in payment to that bank which issued them or in payments at the place where the private bank has its head office, they are allowed to use the Reichsbank's notes (sec. 44, par. 1, no. 5) without limit for payment.

OBLIGATORY REDEMPTION OF NOTES.

The Reichsbank branches are bound to redeem its notes immediately on presentation at full face value, "as

^aBy the Act of June 1, 1909, the notes of the Reichsbank were made legal tender.

far as cash holdings and monetary requirements allow" (sec. 18).

This obligation of redemption extends also to damaged notes, provided the holder presents more than a half of the note or furnishes proof that the remainder of the note, of which he presents only half or less, is destroyed. On the other hand, the Bank is not bound to replace destroyed or lost notes (sec. 4). Damaged or badly soiled notes may not be given out by the Bank (sec. 5).

DENOMINATIONS.

Concerning the denominations of bank notes, the Bank Act provides (sec. 3) that notes may be issued for 100, 200, 500, 1,000, or for a multiple of 1,000 marks. The Reichsbank had formerly issued notes only for 100 and 1,000 marks. As all rights and obligations of the former Prussian Bank have passed over to the Reichsbank, the notes issued by the Prussian Bank before January 1, 1876 are equivalent in all respects to those of the Reichsbank (Proclamation of the Chancellor, December 16, 1875). Of these only an insignificant amount has not yet been redeemed. Some of them are based on the taler standard; others, issued during 1875, are on the mark standard for amounts of 100, 500, and 1,000 marks. Nearly three-fourths of the notes of the Reichsbank consist of 100-mark notes.

^a By the Act of February 20, 1906, notes of the denomination of 50 and 20 marks were authorized.

^b The Revised Bank Act of June 7, 1899, decided that these notes, most of which have probably been lost, should, after January 1, 1901, be cancelled from the balance of the Reichsbank. See below in the concluding chapter on "The Revised Bank Act of June 7, 1899," p. 336 ff.

RECALL AND WITHDRAWAL.

The recall and withdrawal of bank notes may take place only by the order or with the consent of the Bundesrat, which must prescribe in the imperial official gazette (Reichsanzeiger) the nature, the number, and the duration of the notices of recall; furthermore, the Bundesrat must determine the periods during which notes are to be cashed, the places where they are to be cashed, the conditions under which notes presented after the expiry of the fixed period are to be honored, and all other measures necessary for the protection of the holders of the notes (sec. 6). In accordance with this regulation, notes based on the taler standard and the 100-mark notes of the Prussian Bank have been called in, but not precluded, by proclamation on March 15, 1878 and April 10, 1878.

PROTECTIVE MEASURES AGAINST COUNTERFEIT BANK NOTES.

Owing to the insignificant value of the material out of which bank notes are made, the danger from counterfeits is always imminent. In order to meet this danger as far as possible, the counterfeiting of bank notes is in section 149 of the Penal Code placed on the same footing as the counterfeiting of coins and paper currency. The punishment for counterfeiting is imprisonment for not less than two years.

According to a resolution of the Bundesrat on November 30, 1876, all imperial and state treasuries must hold counterfeit and falsified notes of the Reichsbank, and, in case the notes are recognized immediately as counterfeits, must give notice at once to the proper legal or police authorities, with submission of the counterfeit; if the counterfeit

appears doubtful, they must send the note to the Reichsbank Directorate to be tested. Information is to be given by the legal or police authorities to the Reichsbank Directorate of any proceedings or investigations regarding the falsification and imitation of the Reichsbank's notes; the forged notes must be submitted, as soon as practicable, to the Reichsbank Directorate and must be preserved.

Every possible difficulty is put in the way of forging by the process for the manufacture and technical execution of notes.

The manufacture and execution, withdrawal, and cancellation of notes of the Reichsbank take place under the supervision of the imperial debt commission (*Reichsschulden-Kommission*).

Notes of the Reichsbank and imperial treasury notes are made in the imperial printing office from a peculiarly rippled hemp paper interspersed with fibres. The manufacture of this paper, which is called after the in ventor, an American, "Wilcox paper," is full of technical difficulties.

The exclusive right to the Wilcox process was purchased by the former Prussian state printing establishment, and became the property of the Empire when the latter took over the printing works. New imperial treasury notes were produced in 1882 from this paper, and put into circulation in exchange for the notes of the old emission (with the date July 11 1874). In a short time, however, more or less deceptive counterfeits were discovered, which were produced from a paper made in imitation of the Wilcox paper. To create a greater security against such counterfeits the paper used in the manufacture of imperial treasury notes

is legally protected by a law of May 26, 1885. Paper, which is so similar to that used in the manufacture of imperial treasury notes that the difference can be perceived only with difficulty, may neither be manufactured, nor introduced from abroad, nor sold, nor kept for sale, nor otherwise brought into circulation without permission of the Chancellor or of a body authorized by the Chancellor. Deliberate contravention of this law is punished by imprisonment up to one year, and when the act is committed with counterfeiting in view, by imprisonment from three months up to two years. A contravention through negligence is punishable by a fine up to 1,000 marks or imprisonment up to six weeks.

This protection is not limited to Wilcox paper, the name of which is not mentioned in the act, but extends to all paper which may be used for the manufacture of imperial treasury notes. On the other hand, this protection is granted only to the paper of imperial treasury notes; the notes of the Reichsbank, however, enjoy the advantages of this protection if they are made from the same paper.

Up to the present, extensive forgeries have not occurred with the exception of a single case, in which the question of theft by an officer of the imperial printing establishment was involved.

DEVELOPMENT OF NOTE CIRCULATION.

TOTAL NOTE ISSUE

The notes of the Reichsbank have increased rapidly—an increase interrupted only during a very few years. Whereas the average circulation in 1876 amounted to 684,900,000 marks, it amounted in 1899 to 1,141,800,000,

and in 1900 to 1,138,600,000 marks. This increase was coincident with the development of economic conditions in Germany, and, above all, with the increase of the German stock of specie, which has been estimated at 2,670,000,000 marks at the beginning of 1876 and nearly 3,800,000,000 marks in 1900. At the same time the circulation of Reichsbank notes has increased outside the offices of the Reichsbank. The bullion of the Reichsbank amounted on an average in 1876 to 510,600,000 marks; outside the Reichsbank there were about 2,160,000,000 marks in German metallic money, while the average note circulation of the Reichsbank amounted to 684,900,000 marks—that is, about 32 per cent of the specie in circulation. The average amount of bullion of the Reichsbank in 1900 amounted to 817,100,000 marks; in free circulation there were 2,983,000,000 marks, with an average circulation of bank notes of 1,138,600,000 marks, or about 38 per cent of the metallic money in free circulation.

The variations in the average note circulation from year to year show clearly the influence of changes in economic conditions. The average note issue for the years of economic decline, 1878 and 1879, was less than that of the two first years of the Reichsbank's existence; it then shows a considerable increase until 1882, from 622,600,000 marks in 1878 to 747,000,000 in 1882; in the years of economic standstill a slight retrogression took place to 727,400,000 marks in 1885, then a new advance up to 987,300,000 marks in 1889, the highest point of the new prosperity; the years of depression, 1890 to 1893, do not reach these figures; from 1894 on there begins a new increase up to 1,141,800,000 marks in

1899. Besides these movements of economic life, which were mainly responsible for these fluctuations of note issue, the variations in gold imports have exercised a certain influence and have effected several modifications. As the gold from abroad flows primarily into the Reichsbank, principally in exchange for its notes, each heavy importation of gold must lead to a larger issue of notes. Thus the large gold purchases of the Reichsbank in the years 1885 to 1888 certainly helped in the great expansion of note circulation during those years, and, furthermore, the great increase of 111,000,000 marks in note circulation from 1893 to 1895 is to be attributed mainly to the heavy gold importations of the year 1894.

UNCOVERED NOTES.

Far more characteristic than variations in the total note circulation are the fluctuations of the uncovered note issue. Whereas the total note circulation shows an almost uninterrupted growth, the development of uncovered notes is much more unequal. The years of economic standstill show a decided falling off, particularly those years which showed a strong influx of gold; the years of economic rise show a considerable increase. average uncovered note circulation fell to 78,500,000 marks in 1879, 8,700,000 marks in 1892, and 30,600,000 in 1894, and while in 1888 the average stock of bullion exceeded the average note circulation by more than 1,000,000 marks, the average uncovered note circulation always reached a high figure in years which denote an upward trend. It amounted in 1882 and 1890 to 152,000,000, in 1899 to 281,100,000, and in 1900 to 284,700,000 marks.

The same fact is to be observed in the course of the various years; for both note circulation and uncovered circulation reflect faithfully the demands for money. Both are regularly lowest in the first months of a year in which there is little demand for money, and highest in the last quarter of a year in which there is a strong demand for money; both show rapid advances at monthly and quarterly periods at which large payments are made. But these movements are much sharper in uncovered note circulation than in note circulation. In 1899, for instance, the total circulation of notes ranged between 1,013,000,000 marks on February 23, and 1,383,000,000 marks on September 30; the difference between the two extreme amounted, therefore, to 370,000,000 marks. points The uncovered note circulation fluctuated in the same year between 70,500,000 marks on February 23 and 664,600,000 marks on September 30; the difference was therefore 594,100,000 marks, and consequently greater by more than 200,000,000 marks than the difference in the case of note circulation.

CAUSE OF FLUCTUATIONS OF UNCOVERED NOTES.

The cause lies in the fact that the domestic demand for money applies to metallic money as well as to bank notes. An upward economic trend increases not only the need for notes for larger payments, but also the need for small money for the payment of wages, etc. The increased need of metallic money is often considerably greater, because the large transactions in which bank notes alone are considered are settled more and more by methods avoiding the use of cash. The increase in times of pros-

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perity of transfer transactions of the Reichsbank, often with a simultaneous decrease of the balances of current accounts, bear witness to this, as does also the increased business of the clearing houses. As these methods come into consideration only in the case of larger payments, they probably work against an increase of notes, but not against the increased need of specie for smaller payments. As the bullion of the Reichsbank is the reservoir out of which the needs of trade are met by bill discounts, etc., by cashing notes and drawing on balances, upward tendencies of trade, along with an expansion of the note issue of the Reichsbank, frequently effect a still heavier decrease of the stock of bullion, and both movements find expression in the final figures for uncovered note circulation.

Uncovered notes are the elastic part of monetary circulation, and the changes in it make perceptible the fluctuations of money demands on the Reichsbank. Since the establishment of the Reichsbank, the fluctuations in various years in the domestic demand for money have also undergone a material increase, along with the development of economic conditions. Thus the demands made by trade on the elasticity of uncovered note circulation have considerably increased. Whereas in the development of note circulation the important and constant increase in the average of the various years, from 685,000,000 marks in 1876 to 1,142,000,000 in 1899 and 1,139,000,000 in 1900, is most striking, there is no constant growth in uncovered note issue. as 1895 the average uncovered note circulation was

50,000,000 marks—considerably smaller than in 1876, with 120,000,000 marks. Even under the strained conditions of 1800 and 1900, the average uncovered note circulation of the Reichsbank was greater by only 161,000,000 and 164,000,000 marks, respectively, than in 1876, whereas the difference in note circulation amounted to 451,000,000 and 454,000,000 marks, respectively. The most striking fact in the development of uncovered note circulation is perceived in the increase of "ranges" (Spannungen; differences between the maximum and minimum) within the various years. Whereas in 1876 the difference between the maximum and the minimum of uncovered note circulation amounted to only 212,500,000 marks, it was as high as 594,100,000 in 1899. That the increase was on the whole continuous is seen when one observes the development in periods of five years. We then get the following results:

[Amounts expressed in 1,000 marks.]

Average un- covered note circulation.			7.	1 102, 263 9 117, 113 8 73, 943 7 48, 879 6 2,8 6,9
Range,			9	267, 551 302, 469 566, 688 619, 447
Uncovered note circulation.	Minimum.	Amount.	٠,	- 25,350a 4.082 -170,630a -177,764a -128,103a
		Date.	4	Mar. 23, 1879 Mar. 15, 1883 June 7, 1888 Feb. 23, 1895 Feb. 23, 1895
	Maximum.	Amount.	÷	242, 201 Mar. 306, 551 Mar. 396, 058 June 441, 683 Feb. 664, 633 Feb.
		Date.	2,	July 1, 1876 Dec. 31, 1884 Dec. 31, 1889 Dec. 31, 1895 Sept. 30, 1899
Periods,			ı,	1846-1889. 1886-1890. 1891-1895.

a Barvorrat (consisting of gold and silver reserves and holdings of imperial treasury notes and of notes of private banks of issue) greater than the note circulation by this amount. The increase in "range" figures is, as a comparison of column 6 with column 7 shows, independent of the average uncovered note circulation. There was a considerable progress from 1881–1885 to 1891–1895, while the average of uncovered notes declined from 117,000,000 to 49,000,000 marks.

UNCOVERED NOTES AND CONTINGENT (LIMIT).

The greater the fluctuations of uncovered notes the more difficult it was for the Reichsbank to keep within the limit fixed for uncovered notes by note taxes (cf. Tables 19 and 22). The yearly average of uncovered notes was always less than the contingent; in most years it remained considerably below this amount. The whole development of the German monetary system has led to more frequent and heavy excesses of the legal limit on settlement days. While in the first five years of the Reichsbank's existence the difference between the maximum and minimum of uncovered note circulation (267,600,000 marks) did not reach by several million marks the amount of the contingent (273,900,000 marks), the difference in the year 1899 (594,100,000 marks) was twice as large as the note contingent. The highest amount of uncovered notes in 1876 was higher than the year's average by only 122,000,000 marks; in 1899, by 383,000,000; the year 1899 had to show an extra cover of 90,000,000 marks if the contingent was not to be exceeded. Under these circumstances it is conceivable that the number of issues exceeding the contingent has constantly increased. In the first five years of the Reichsbank's existence there was no excess issue. The period 1881-1885 showed five excess issues,

the largest being 32,700,000 marks, on December 31, 1884, The following five years, 1886-1890, brought ten excess issues, of which six occurred in the one year 1890; the largest, 109,500,000 marks, was on December 31, 1889. In the following years of commercial standstill and small demand for money the excess issues became less frequent: only four took place in the period 1891-1895, the largest on December 31, 1895, with 148,300,000 marks. period of business revival, which had begun in 1895 and led to a considerable increase both of the average and the fluctuations of uncovered notes, caused an extraordinary increase in the number and extent of excess issues. There were 71 in the five years 1896-1900, and the highest figures were reached on September 30, 1899, with 371,200,000 marks. The importance of these increasingly numerous excess issues for the discount policy of the Reichsbank and the extension of the Reichsbank's contingent, authorized by the Revised Bank Act (Banknovelle) of June 7. 1899, will be described in special chapters (cf. pp. 202ff. and 343ff.).

THE RELATION BETWEEN NOTES AND COVER FOR NOTES.

When the system of contingents was introduced, the main point was that an excess of the legal limit should always be possible when justified by the condition of the money market. The case is different with regard to the provision for a "one-third cover." The regulation that metal and imperial treasury notes for at least one-third of the notes in circulation must be on hand in the vaults of the bank as cover is absolutely binding.

In reality the Reichsbank's cover for notes has always been considerably larger than the prescribed minimum. Even the most unfavorable state of affairs, on September 30, 1899, was still such that metal and imperial treasury notes together constituted 50.93 per cent of the notes in circulation. Only on this one settlement day was the metal cover for notes a little under 50 per cent.

In the whole previous period the cash cover for notes was subject to the same fluctuations as uncovered Every increase of uncovered notes must, if the cash holdings remain the same, injure the proportion between notes and cover. In their direction, therefore, the fluctuations in cover run parallel with those of uncovered notes. They were influenced, however, by the fact that, on the whole, the Reichsbank's stock of ready money has considerably increased; with a larger cash reserve and the same circulation of uncovered notes, the proportion between notes and cover is more favorable. Thus the average of uncovered notes was (within the meaning of section 9 of the Bank Act) just the same in 1890 as in 1882, viz, 152,000,000 marks; but though the cash holdings amounted in the latter year to only 595,000,000 marks it ran, in 1890, to 832,000,000. As a result, the proportion of cover was in 1882, with an equal circulation of uncovered notes, only 79.6 per cent, as compared with 84.5 per cent in 1890. more, the proportion of metal cover was almost the same in 1881, with 75.26 per cent, and 1898, with 75.67 per cent, in the latter year even more favorable; yet the

notes in circulation uncovered by metal amounted in 1881 to only 183,000,000 marks, in contrast to 273,000,000 in 1898 (cf. Table 20).

In consequence of the increase of cash holdings, the cover for notes has increased when uncovered notes have decreased, and has, in a smaller measure, decreased when uncovered notes increased. The metallic cover for notes amounted on an average in 1876 to 74.55 per cent; only in 1882, 1899, and 1900 have the figures been lower. The figures were highest in 1888 with 96.82 per In 1892, 1894, and 1895 the figures were 95.67, 93.40, and 92.35 per cent. The enormous demand for money in the last five years has caused such a heavy increase of note issue and decrease of metal stock that the average metal cover gradually fell to 72.3 per cent in 1899 and 71.8 per cent in 1900. It must be emphasized that this amount of cover falls only a little short of the first years of the Reichsbank, although the average note circulation of the Reichsbank uncovered by metal amounted in 1899 to 316,000,000 marks, in 1900 to 321,000,000 marks, against only 174,000,000 marks in 1876.

As the Reichsbank, in the interest of the German imperial standard, always pays on demand in the one medium of full value, namely, in gold coin, it is of importance to know how the gold reserve has developed as metallic cover for notes.

When one regards the metal reserve of the Reichsbank from this point of view, the first thing noticed is that in the first years of the Reichsbank's existence, in which

occurs the conversion of German silver currency into a gold currency, the stock of gold, which had been collected in the Prussian Bank for this transformation, diminished from an average of 287,000,000 marks in 1876 to an average of 207,000,000 marks in 1881, whereas a considerable increase took place in the stock of silver during The result was that the gold cover for this time. notes decreased from 41.9 per cent to 28 per cent. Since then the gold reserve of the Reichsbank has been substantially strengthened but not without considerable fluctuation, while the silver reserve, with a short break at the beginning of the nineties, has constantly declined. The result was that gold cover for notes which since 1881-82 has moved in the same general direction as the total metal cover, has, on the whole, increased more favorably than the latter. Since 1883 it has amounted to considerably more than the prescribed "one-third cover" of total metal holdings and imperial treasury notes, and since 1887 has never fallen below 50 per cent. during the great strain of 1899 it kept up to 50.2 per cent, with a note circulation of 1,142,000,000 marks and a metallic cover of 72.30 per cent, while in 1881, with a note circulation of only 740,000,000 marks and a metal cover of 75.26 per cent, it amounted to only 27.9 per The average gold cover was most favorable in 1888 with 65.2 per cent and 1895 with 64.2 per cent. These figures show what an extraordinary improvement the most important metallic cover for notes has experienced since the beginning of the eighties, and

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how much the whole currency of Germany has been consolidated.^a

aThe complaint has frequently been made that the shareholders of the Reichsbank have received in the right to issue notes a gift which yields many millions annually. The demand for a complete state ownership of the Reichsbank is always based on the argument that the proceeds of the note privilege ought to go to the Empire, which alone ought to exercise or But the services rendered by the Reichsbank, and the confer this right. conditions upon which the note privilege is legally dependent, are usually overlooked or considerably underestimated. Above all, the services which the Reichsbank is bound to render to the Empire must be taken into account. First among these is the gratuitous management of the imperial treasury, and the duty of issuing to certain bank officers imperial gold coins for subsidiary coins. The Reichsbank must, in addition, make certain payments. These consist first of all in the share of profits belonging to the Empire, and secondly, in the note tax which is paid to the Empire on all notes issued in excess of the contingent limit; to these must be added the revenue of 1,865,730 marks which was taken over from the Prussian Bank and is payable to Prussia until the year 1925, and finally, the lump sum of 15,000,000 marks paid to Prussia in 1876 as compensation at the establishment of the Reichsbank. Altogether, the Reichsbank has paid in the twenty-five years of its existence: to Prussia, in lump sum and in annual revenues, 61,600,000 marks; to the Empire, in note taxes, 9,500,000 marks, and in shares of profits 133,400,000 marks, so that its payments to the Empire and Prussia amount up to the present to 204,500,000 marks (cf. The compensations paid by the Reichsbank in the first years of its existence to several private banks of issue for the surrender of their note privilege, and amounting altogether to 169,066 marks, are also to be subtracted from the proceeds of the Reichsbank.

On the other hand, the clear profits from the issue of notes can only be approximately ascertained, because the cash holdings of the Bank can not, without difficulty, be divided among notes and other liabilities. Besides, a proper share of the costs of managing the Bank, and separate balances for the manufacture of bank notes, must be deducted from the gross proceeds of the note issue.

If, therefore, a calculation be made, which of course could only be approximate, it will be found that the financial importance of the note privilege has been greatly overestimated, and that, especially in accordance with new legislation which considerably curtails the dividends of the shareholders, the Empire is assured, without complete acquisition of the Reichsbank, of the proceeds of the note privilege.

CHAPTER IV.

TRANSFERS AND THE CLEARING SYSTEM.

(Giro-und Abrechnungsverkehr.)

TRANSFERS (GIROVERKEHR).

THE SYSTEM OF TRANSFERS.

Transfers are cash-saving methods of payments between patrons of the same bank; instead of a cash payment a transfer is made on the books of the Bank so that the sum is deducted from the account of the payer and added to the account of the payee. With this is connected the acceptance of cash for current accounts and the payment of cash from the accounts, also settlements of all kinds, credit and debit, with the owners of accounts.

The transfer of large sums on the books of the Bank has great advantages over cash payments. The trouble of testing and counting, the danger and the cost of handling cash are done away with. The completed payment is recorded by the transfer on the books of the Bank. Deterioration, unavoidable in circulating money, is avoided when the money lies idle in the bank; the loss of interest incurred in the delivery of cash is also avoided.

These advantages are sensibly increased by the circumstance that after transfers have been generally adopted there is no possibility of withdrawing all balances, because the business world in critical times can not do without the facilities of transfers, and therefore can not

afford to withdraw the balances of their current accounts (Giroguthaben). Consequently, the bank can use current account moneys for granting short credit. This is another important saving of cash. The balances on current accounts help the market by credit granted; they themselves are created in part by the granting of credit.

It is a necessary condition of a system of transfers that the possessor of an account can withdraw in cash the balance in his favor. The deposits on these accounts are therefore demand liabilities, and are to be treated by the Bank like bank notes. On account of this similarity, the transfer accounts are particularly suitable for banks of issue. The advantages of the combination of notes and transfers are especially noticeable, in that the ready money flowing to banks of issue as a result of transfer accounts diminishes the uncovered note circulation.

REASONS FOR THE REORGANIZATION OF TRANSFERS.

Through various circumstances the Reichsbank at its establishment paid particular attention to transfers. The Bank Act assigns to the Bank the task of "facilitating settlements and rendering available capital productive." The Bank could not satisfy this requirement better than by substituting for cash payments transfers on the books, and collecting idle cash from various transactions into a great productive fund of current accounts. The Bank was practically forced to do this by the withdrawal of trust funds committed by the courts to the care of the Prussian Bank, and by the limitation of notes through the system of note taxes. A substitute for the funds thus withdrawn had to be found. A substitute

could not be sought in interest-bearing deposits. All experts agree that interest-bearing deposits are not suitable for a bank of issue, and on this account the Bank Act (sec. 13, par. 7) had limited the amount of interest-bearing deposits to the capital stock and reserve fund. Thus everything pointed to transfers, especially the fact that the cash brought in by transfer transactions can be regarded as cover for notes within the meaning of the Bank Act, and that consequently every increase of transfers was sure to extend the limit for note issues.

The Reichsbank, at its establishment on January 1, 1876, found itself confronted by the necessity of creating something entirely new in the way of transfers, for the transfer business of its predecessor, the Prussian Bank, was almost negligible.

The Prussian Bank had had no more facilities for transfers than private institutions. Its transfer business was limited, moreover, principally to Berlin; outside Berlin there existed in 1875 only the insignificant transfer institution (*Giroanstalt*) in Danzig.

Immediately upon the conversion of the Prussian Bank into the Reichsbank, the transfer business of the new Bank was considerably extended through taking over the state Girobank of Hamburg, which had developed transfer transactions, as local business, almost to perfection, and had educated the Hamburg business world to an extensive use of the facilities for transfers. The Reichsbank took over with the Hamburg Bank—this was an expressly stipulated condition—its transfer department (Giroverkehr) essentially in its previous form.

INTRODUCTION OF GRATUITOUS DISTANCE TRANSFERS.

The most important means for stimulating this branch of business lay, however, in a field in which neither the Hamburg Bank nor a foreign one could serve as model. Even the Hamburg transfer system was purely local. The transfer system of the Reichsbank, which has now become a model for foreign countries, owes its great development to the introduction of distance transfers free of cost. The Reichsbank first made all its independent branches transfer banks (cf. Table 38), which were connected by means of free distance transfers. The transfer system was thus changed from a limited local system into a general system comprising all German economic territory.

As the Bank added to the advantages of transfers offered gratis by the Prussian Bank the advantage of being able to make and receive payments free of cost between all branches of the Reichsbank, a Reichsbank current account (Girokonto) became valuable even at such places in which was lacking the preliminary condition of a profitable local transfer system, namely, sufficient business to pay for the trouble. Deposits and withdrawals, for which a charge is generally made, became, through the innovation of transfers, gratuitous to parties having a transfer ac-Remittances of the Bank have thus been furthered count. greatly by transfer accounts, and business has likewise gained in facility. Through the constant extension of transfers the way was paved for the gradual transformation of most German payment operations into the forms of transfers. Even for those banks which encourage transfer accounts with certain clients, the transfer system of the Reichsbank has become indispensible because of

the advantages which it affords their clients. The booked items at the Reichsbank represent a highly organized payment system, and the Reichsbank itself appears as the great clearing house of the whole Empire.

ORGANIZATION OF THE TRANSFER SYSTEM.

Immediately after the adoption of the Bank Act, the Directorate of the main bank in Berlin began to prepare for the organization of the transfer system. The work was hastened after Prussia had, on February 1, 1876, used the right reserved to it by section 12 of the contract of May 17–18, 1875, of recalling trust funds deposited by order of the courts.

The following are the essential features of the reorganized transfer system:

The signature of the depositor to the printed "Regulations for transfers at the Reichsbank" is required as proof of the conclusion of a contract. The account is opened by a cash deposit called balance (Guthaben). This is increased by further cash deposits, by transfers from other current accounts, and by an adjustment of transactions between the Bank and the depositor (crediting of discounted bills, granting of loans on collateral, etc.). The depositor can close the account by drawing out the balance in cash, by transferring it to other current accounts, and by settling with the Bank (debiting bills made payable at the Bank by the account holder, of collateral loans due from him, etc.).

The red check, which represents the real transfer draft, was introduced for transfers from one account to another. The white checks serve for the withdrawal of cash and

for settlement of transactions with the Bank. The red check bears the name of the person to whom the transfer is made, and is not transferable. The white check, on the contrary, is made out in the name of the payee, with the addition "or bearer." For making payments between different places (distance transactions) the red check, that is, the transfer from account to account, is used almost exclusively, as a fee is charged for cash payment from one account to another by means of a white check, and such payment can be made only after it has been determined whether a balance is at hand at the branch.

The transfer facilities provided by the Reichsbank are open to all classes of population, to institutions, and to public authorities. The Bank opens an account for anyone who enjoys the necessary confidence. The Bank expects the holder of the account to keep a balance corresponding to the labor involved. A fixed rule is not given: the amount of the minimum balance can be fixed only according to the extent to which the depositor claims the services of the Bank. Nevertheless, the opening of accounts with tradespeople is dependent on a previous understanding about the minimum balance, which should not go below 1,000 marks in small places, and at larger trade centres must amount to several thousand marks. transactions on the account increase unexpectedly, and if the Bank is not sufficiently compensated in other directions, it can request the holder of the account to strengthen his balance. The Bank can, at any time and without assigning reasons, give notice to terminate an account. This generally happens when an account is misused.

On April 10, 1876, transfer departments could be opened on the new basis in Berlin and at all the independent branches. The new department began with an extended circle of interested parties. The funds which flowed to the Bank from the encouragement of this business increased rapidly. After the large holdings of the Hamburg Girobank were taken over, the balances of private current accounts had slightly exceeded 16,000,000 marks, but amounted no later than May 31—scarcely two months after the general introduction of the system—to more than 94,500,000 marks. The new arrangements subsequently proved suitable for their purpose, and only once experienced an important change in the introduction of clearing offices (cf. p. 115).

EXTENSION OF TRANSFERS.

The Bank has adopted a number of important measuses for the gradual expansion of the system, for the further extension and facilitation of transactions between the Bank and its patrons, between the patrons themselves, and even with outside persons. These provide for transfer deposits by persons not having an account with the Bank, for the collection of bills for current-account customers, for the compulsory domiciling of bills, and, finally, for the gradual extension of the transfer system to suboffices (Reichsbanknebenstellen).

Payments by persons not holding accounts.—As early as 1876, the Bank increased its business to allow anyone to deposit sums, without charge, to any amount at any of the branch offices of the transfer system, for the account of patrons having current accounts in other places. The

acceptance of these "sums paid in by persons not possessing accounts" constituted a necessary supplement of the transfer system, if the transfers of the Reichsbank were to take the place of the obsolete method of adjusting payments by means of dutiable bank drafts. In the privilege thus granted to everybody of gratuitous remittance from place to place, the Reichsbank conceded to persons not possessing accounts some of the advantages belonging to the persons concerned in transfers.

The arrangement quickly became popular, as is shown by the sums paid in by persons not possessing accounts (cf. Table 35), which had amounted to only 133,900,000 marks in 1876 and had risen to 1,317,000,000 marks in 1882; that is, 25 per cent of the sums were remitted in this year from place to place by means of red checks.

In the increase of these deposits, however, one factor retarded the general development of the transfer system. As the most conspicuous privilege of the holders of accounts—that of being able to make payments from place to place without charge—was afforded to persons not holding accounts without obliging the latter to tie up a certain amount of capital, many interested parties were deterred from entering the actual transfer system. The public considered only the immediate advantage and did not reflect that the effectiveness of this system depends not only on the readiness of large circles to make payments by transfer, but also upon the existence of enough accounts to which these payments can be made. Only transfer transactions between persons having accounts can be regarded as real transfers, and the Bank can find remuneration for its trouble only in the accounts bearing

no interest. At more than one place, however, it was observed that the sums paid in by persons not having accounts had reached an extent out of all bounds in proportion to the number of patrons holding accounts. The Bank resolved, therefore, to cease gratuitous work in connection with sums thus paid in, and in this way to draw into the real transfer system the principal persons interested in the transactions. However great a value the Bank set upon the principle of gratuitous transfer remittances. the consideration had to be taken in account, that in the acceptance of payments a service is rendered to persons who are in no way connected with the transfer system. Certainly there are found among such persons many who have current accounts at another place, and now, in person or through commercial agents, use for remittances to their own firms this favorable method offered by the Reichsbank. Sometimes this use is made chiefly in the interest of the payee, on whom the cost of transportation would otherwise fall. In general, however, the levying of a fee on deposits by persons not possessing accounts is not inconsistent with the principle of free transfer remittances, and is justified, moreover, by the outlay of the Bank for printing and delivering the forms.

The fee introduced on July 1, 1884, has repeatedly been raised, because the intended effect of stimulating transfer accounts has been realized very slowly. It amounts now to one-tenth on a thousand, and at least 30 pfennigs for each deposit. This mode of payment, however, is cheaper than the inconvenient and uneconomical method of sending cash through the mail; the post-office money order, which is possible only for small amounts, is cheaper

only for very small sums. In this department the Reichsbank does not care to compete with the post-office. The effect of the raised fee was shown by the fact that deposits by persons not possessing accounts did not increase in 1884 and 1885, but diminished by more than 200,000,000 marks, though the number of individual payments showed a slight increase. At the same time, there was an enormous increase in transfers from account to account between different places and in the number of persons holding accounts. The Reichsbank attained its purpose; persons paying in large amounts transfer accounts, and now remitted by means of red checks, while the number of persons paying in small sums continued to increase. Since 1886 the deposits by persons not having accounts have increased uninterruptedly, both in number and in amount. From 380,442 individual payments, amounting to 1,104,400,000 marks in 1885, they rose to 733,805 payments with a total of 3,047,100,000 marks in 1897. This growth has not been brought about exclusively by the sums paid in by private persons, but also by the government treasuries in the province, which assigned to the offices superior to them, and especially to the central office in Berlin, the money not immediately required. This is shown by the fact that in 1898, after whole systems of public treasuries were connected with the transfer system (cf. pp. 104 and 297 ff.), the sums paid in by persons not having accounts decreased to 2,777,900,000 marks, and the decline continued in 1900 to 1,545,900,000 marks.

Collections for current accounts.—Similar to the arrangement for allowing sums to be paid in by persons not hold-

ing accounts, the local collection, without charge to patrons with transfer accounts, of bills, checks, drafts, etc. (Giroeinzugswechsel, cf. Table 56), had in view the facilitation of payments. Soon after the reorganization of the transfer system, however, complaints were made about the improper use of this arrangement. Large numbers of small bills were committed to the Reichsbank for collection on transfer accounts, although the guarantors of these bills were of little interest to the Reichsbank and the collection involved a disproportionate amount of trouble. Moreover, a considerable percentage of these small bills were not paid on presentation, and it was necessary to return them to the persons sending them for collection. On this point, a restriction could be made without injuring the principle of gratuitous services for In 1888, therefore, a fee of 20 pfennigs each was imposed (as in the case of the Austro-Hungarian Bank) on those bills committed to the Bank for collection which had to be returned to the person who sent them in. The effect of this rule was shown in the rapid decline of bills delivered to the Bank for collection, from 713,108 in 1887 to 335,299 in 1889. As bills of small value were mainly concerned, the decline in the number of bills has had no influence on the total value of the bills delivered to the Bank for collection. The total in 1887 was 859,500,000 marks, and in 1889 882,700,000 marks. Since that time the number of bills for collection has been fairly stationary.

Compulsory domiciling of acceptances.—The domiciling of bills at the Prussian Bank by its holders of transfer accounts attained no great importance, for

the transfer system had not been developed. The Reichsbank encouraged this policy with energy. It made, at the opening of a transfer account, the universal stipulation that the holder of the account must make payable at the Reichsbank all bills which bind him to payment (i. e., acceptances), so that at maturity the bills could be honored by means of a simple draft and a debiting of the transfer account. In 1888 holders of transfer accounts were permitted to have bills in their favor paid by the Reichsbank after their transfer accounts had been debited. On the other hand, the obligation of domiciling acceptances was modified at places possessing a clearing system, so that the Reichsbank allowed domiciling to take place not only at its own branches, but also at those banks with which it had daily clearings. Bank always has many matured bills on hand, the routine of business is facilitated for the Bank and for the public by the discontinuation of presentations and cash payments. This relief occurs also when the bill domiciled to the Bank is in possession of a third party, for this third party is usually a banker who settles daily with the Bank by means of transfers. Presentation is not avoided here, but the cash payment probably is, as in most cases the bill can simply be entered to the credit of the presenter's transfer account. In this way the Bank succeeds in concentrating payments in its own hands, and in considerably diminishing the amount of metallic money to be put in circulation.

Compulsory entries on transfer accounts.—The most essential measure for encouraging transfers and for combining them with other branches of the Bank's business

was the regulation of February 1883, according to which all payments which a client with a transfer account is to receive from the Bank are not to be made in cash, but are to be entered to the credit of his account. This applies not only to demands on bills and checks payable at the Bank, but also to bills discounted at the Bank, to those committed to it for collection, and to collateral loans made by it. The holder of the account can dispose of these sums only through transfers. This measure was in the interest of the Bank and of the public. All payments of the Bank to persons having accounts are now concentrated upon the accounts; the Bank now gives cash only on white checks. Thus an effective means is provided against fraud, counterfeiting, and the like. Since the introduction of this regulation the Reichsbank insists more strongly that its patrons in the transfer department comply with the provision requiring them to make their acceptances payable at the Bank. Furthermore, all firms, etc., wishing to carry on a discount business with the Reichsbank are required to open a transfer account.

Further regulations for facilitating the management of private accounts.—The effort to include more private accounts in the transfer system has given rise to a number of further measures.

In 1887 an arrangement was made at a number of places with the post-office authorities. This arrangement now extends to all branches in the transfer system, and stipulates that post-office orders to persons with transfer accounts be entered, if desired, to their accounts. On the other hand, such parties may obtain post-office orders by checks on the Reichsbank (cf. Table 73). In 1900 the

credited post-office orders amounted to 1,252,000,000 marks; the post-office orders paid for by means of checks amounted to 119,000,000 marks.

In a similar manner, since 1885 and 1892, respectively, the payment of register interest (*Schuldbuchzinsen*) of the Prussian debt and of the imperial debt, also, since 1884, the payment of interest on securities deposited with the Reichsbank is made, at the desire of the receivers, through transfers (cf. Tables 71 and 72). Here, also, the importance of transfers has risen from year to year; in 1886, 80.5 per cent of the interest and dividend payments to depositors through the offices of the Bank were made in cash, and 19.5 per cent through transfers; in 1900 the proportion had changed to 65.9 and 34.1 per cent, respectively.

Territorial expansion of transfers (inclusion of subtransfer system of offices).—The the Reichsbank first restricted to the independent branch offices—the head branches (Reichsbankhauptstellen) and branches (Reichsbankstellen). The general inclusion of suboffices (Nebenstellen) in the transfer system was contemplated from the beginning, but was not at first practicable. In the first place, the control of the large cash holdings necessary in transfer transactions pre-Added to sented certain difficulties at the suboffices. this was the fact that, in the middle of the seventies, the management of suboffices was still in the hands of agents, most of whom were taken from other vocations, who regarded their position as an incidental office, and received principally a share of the profits on the transactions arranged by them. These agents could not, however, be saddled with the burdens connected with transfers. for

transfers, being liabilities, yield no profits in which the agents could have shared.

The "Business instructions for transfers" of February 25, 1876, by which the transfer system of the Reichsbank was inaugurated, contained, therefore, no regulations concerning transfers at suboffices. The inclusion of suboffices was the result of a gradual development which was made possible by the complete transformation of the organization and nature of suboffices. Out of small agencies have grown business centres, managed by trained officers, at which one person is no longer able to supervise the work.

The first general arrangement which the Reichsbank made in the interest of transfer suboffices permits clients (with transfer accounts) residing in such places to avail themselves of the gratuitous services of the suboffice in the withdrawal of cash from their balance at the branch office. Even this procedure was very cumbrous.

More important was the power granted to suboffices of accepting deposits from persons not possessing accounts. This right was especially valuable to firms in the town of a suboffice as long as the possession of a transfer account was so inconvenient for them. For the patrons in the transfer system residing there, however, this provision brought with it the important right of depositing sums at the place of residence to the credit of their account at the superior branch.

The decisive step, however, was that of charging the suboffice itself with the management of accounts. Only with the possibility of using transfers of the Reichsbank without the agency of the postal system did the offices

attain their full significance for transfer clients. For the purpose of control, the accounts established at the sub-office are kept in duplicate at the superior branch. The account, as kept here, is legally authoritative for the relation of the Reichsbank to the client, and the latter is bound to inform the superior branch of all payments made by him at the suboffice by means of transfers. Transfers from and to the suboffice were made for the time being through the superior office.

The transfer system had been introduced in this form as an experiment in 1876 at several suboffices in Württemberg. Abuses did not arise, and the provisional arrangement, the usefulness of which was evident, was soon extended to other suboffices. Further progress was made in 1883 and 1888 by the extension of the powers of sub-In 1883 the independent branches and in 1888 the suboffices were instructed to make transfers direct to the receiving suboffice and no longer to the superior office. On account of the increase of cash from the large sums paid in, and on account of the work arising from sending the advices, this power could not be extended beyond certain limits (beschränkter Giroverkehr) in suboffices managed by one official. Suboffices managed by two officials are, on the contrary, generally invested with extended powers (erweiterter Giroverkehr).

Along with the internal expansion of the transfer system went the extension of the system to more branches. Of the 330 branches of the Reichsbank only the few suboffices and warehouses without a separate cash office are excluded from the transfer system. Moreover, the business centre of all suboffices is in the transfer transactions.

The Reichsbank has therefore been enabled to open branches at places where a sufficient field could not have been found for a discount and collateral loan business. While, on the one hand, the great extension of branches, in which the Reichsbank excels all other central banks, is largely attributable to the transfer system, the transfer system itself has attained its full importance for German payment operations only through the continued extension of the system of branches. The whole of Germany has become, so to say, a single "banking place" through transfers in conjunction with the great number and the general extension of the branches of the Reichsbank.

THE SHARE TAKEN BY DIFFERENT VOCATIONS AND BY PUBLIC AUTHORITIES IN TRANSFERS.

It has already been mentioned that the advantages of facilities for payments, which extend to all parts of the Empire, are open to all persons, whatever their calling. But as the transfer system in its territorial extension found most favorable soil in the great centres of trade, so those callings, which by nature require more rapid payment operations, have been able to turn the advantages of transfers to the most account. First of all come the banks, the business of which consists to a great extent in demands for money and in the acceptance and making of payments. Then follow commerce, industry, trade, and finally agriculture.

An investigation undertaken on May 7, 1900 (cf. Table 40), resulted as follows:

Of the 13,689 private transfer accounts, with a total balance of 240,000,000 marks, 7,368 accounts with a total of 179,000,000 marks belonged to commerce, banking,

transportation, and insurance—that is, 53.8 per cent of all transfer accounts of private persons and concerns and 74.6 per cent of their balances. Of this, the banks alone have a total balance of 142,000,000 marks. The share of industry and trade is considerably smaller; the number of accounts was less in proportion than the sum of the balances. The latter with 51,700,000 marks amounted to 21.5 per cent of the private balances; the number of accounts was 5,189—37.9 per cent. Agriculture (and allied trades) has only 183—1.3 per cent of all transfer accounts—and the balances (923,000 marks) did not amount to one-half of one per cent of all private balances. The average account in the case of commerce, etc., was 24,297 marks, of banks 57,541 marks, of industry and trade 9,955 marks, and of agriculture 5,046 marks.

A similar investigation at the end of 1898 led to similar results in the divisions according to the vocation of the holders of accounts.

For a long time the transfers of the Reichsbank were confined principally to the business world; public authorities became friendly very slowly. Only the imperial post-office authorities made use of the transfer system of the Bank to any great degree since 1879 (cf. p. 297). A more energetic collection of public funds by the Bank has been made only in recent years (from 1896 on) through the connection of whole groups of public treasuries of the Empire, Prussia, and Baden with the transfer system of the Bank (cf. p. 297 ff.).

Total development of transfers.—The Reichsbank has succeeded through the systematic organization of the transfer system in bringing this branch to an advanced

stage of development (cf. Tables 34 and 38). Transactions on transfer accounts, which had amounted in 1875 at the Prussian Bank to only 834,000,000 marks and at the Hamburg Bank to 2,658,000,000 marks, rose in the early years of the Reichsbank's existence to 16,700,000,000 marks, and by the year 1900 to 164,000,000,000 marks. The number of accounts taken over by the Reichsbank from the institutions mentioned was not much more than 700. The number rose in 1876 to 3,245, and by the end of 1900 to 15,847.

The development did not, however, proceed without interruption. After the number of participators had remained nearly stationary since the end of the seventies, there began in 1882 a decline both in sum total and in the accounts, which is all the more remarkable as in this year business activity was exceptionally great. Since then there has occurred only one other temporary decrease, in 1892—clearly in connection with the economic depression of that year.

When one compares the development of economic life with the development of transfers, it is not always possible to establish a connection. The development of transfers was up to this time due mainly to the continual expansion of the system, especially to its extension to more places, and to the inclusion of state treasuries; in view of this, economic development had not yet become an influential factor.

The figures above give an idea of the expansion of the whole transfer system.

Development of the branches of the transfer system.—The increase is to be found also in all branches, though

in varying degrees. Cash deposit withdrawals show a slower and smaller increase than sums debited, credited, and transferred on the books of the Bank, by which considerable ready money is saved. The percentage of cash payments in the total transactions declines continuously; it amounted as late as 1886 to 28.2 per cent, in 1900 to only 16.8 per cent.

On account of certain changes in bookkeeping it is possible to compare only the years within the three periods, 1876–1885, 1886–1892, and 1893–1900; within each one of these periods the percentages of cash payments declined from 39.5 per cent in 1876 to 35.9 per cent in 1885, from 28.2 per cent in 1886 to 27 per cent in 1892, and from 19.4 per cent in 1893 to 16.8 per cent in 1900. The saving of cash in the total transactions has consequently increased considerably.

The sums received for distance transfers have increased steadily and almost uninterruptedly from 2,000,000,000 marks in 1876 to 25,900,000,000 marks in 1900. The percentage of distance transfers in the total business attained its highest point in 1881 with 32.1 per cent, and, after sinking for a time to 26.1 per cent (1891), amounted in 1900 to 30.7 per cent (cf. Table 34). The first years of the reorganized transfer system show relatively the greatest development. The explanation is that the advantages of distance transfers are more apparent in the saving of postage and interest than in the case of local transfers, in which the advantages lie chiefly in the saving of labor, which can scarcely be expressed in figures.

The recognition of the advantages of local transfers has gradually spread. In recent years local transfers have had the greatest increase. From 1893 to 1900 at the amounts received in local transactions have risen from 10,400,000,000 to 24,200,000,000 marks. The share represented by local transfers has risen in the same time from 25.3 to 29.5 per cent.

Local differences of development.—A complete picture of the development is gained, however, only when one probes somewhat deeper into details. The soil for local transfers is favorable if the number of local payments is large and if the total monetary operations of a large district concentrate in a common centre. The more nearly these conditions are approached the more rapidly can local transfers develop in proportion to distance transfers. The necessary conditions for a large local business were present from the beginning in those "bank places" where the Reichsbank established clearing houses in the eighties, on account of the profitable business existing there (cf. p. 115). If these places be contrasted with the remaining offices, the following result is obtained:

At the ten places with clearing departments, 31 per cent of the total business in 1893 and 35.7 per cent in 1900 was represented by local transfers, and 22.9 and 25.6 per cent, respectively, by distance transfers. The proportion was exactly the reverse at other branches. Here we have in the two years a percentage of 11 and 18.1, respectively, for local transfers, and 36.6 and 40.1, respectively, for distance transfers. The difference is

a Only the comparisons since 1893 give a true picture, as the booking of local transfers previous to this was made according to other principles.

self-evident: but one observes, if the years 1893 and 1900 be compared a in both groups of branches, a certain tendency to level down this difference. transfers have increased considerably more at branches without clearing departments than at those with clearing departments, and much more than distance transfers in both groups. Of all local transfers, only 12.4 per cent belonged in 1893 to branches without clearing departments, as contrasted with 21.1 per cent in 1900, while the share of these branches in distance transfers increased, but only from 38.7 to 45.4 per cent. This displacement is caused partly by the fact that local business at places with a well-developed banking system had increased rapidly soon after the beginning of the transfer system, whereas at other places the development was gradual.

Of like interest with the comparison of these two groups of banking institutions is a comparison of the transfers of the main branch at Hamburg and all the other branches. The Hamburg transfer system can serve, since the commercial houses there have used the system for a century, as a pattern for other branches. Whereas in 1876 the cash payments in Hamburg amounted to 11.5 per cent, they amounted at other branches to 54.4 per cent.^b Local

^a Only the records since 1893 give a true picture in the comparison, as the booking of local transfers previous to this was effected in accordance with other principles.

b In judging these figures, we must take the following into consideration: since 1893 only the sums actually paid in cash, and bills collected for current accounts, have been booked as cash payments. Lombard loans etc., were also entered to the credit of accounts. Until 1885 the amounts of discounted bills were entered to the credit of accounts.

transfers, on the other hand, represented in Hamburg 81.3 per cent, at other branches only 13.1 per cent.

Up to 1900 the following changes have occurred, as compared with 1876. Cash payments have decreased in Hamburg from 11.5 per cent to 5.8 per cent, at all other branches from 54.4 per cent to 18 per cent. Local transfers at Hamburg have declined from 81.3 per cent to 65.1 per cent, and risen at other branches from 13.1 per cent to 26 per cent. Distance transfers have in Hamburg increased from 7.1 per cent in 1876 to 19.9 per cent in 1900, and at other branches have declined from 32.4 per cent to 31.8 per cent.

Hence, the transfer transactions of other branches of the Reichsbank approach the figures of Hamburg, where this method of payment was well developed before the establishment of the Reichsbank; herein is shown how the methods of payment in all Germany are gradually being adapted to the facilities of transfers offered by the Reichsbank.

It follows that the average amount on red checks, which serve only for transfers, has declined from 12,500 marks in 1876 to 7,500 marks in 1900. The average cash deposit and the average local transfer shows a similar decline. In contrast to this, the average amount of the white check, which is used for cash withdrawals, is still as high as in 1876, namely, 15,000 marks. Whereas the check system penetrates very slowly into the circle of small business houses, holders of accounts are rapidly learning the sensible use of transfers. As a result of this, the cash-saving effect of transfers increases, while the movements of transfer balances increase, and transfer transactions

become more and more valuable to the Bank as factors in discounts.

Increased use of transfer accounts.—The great economic gain resulting from the development of transfers can be fully estimated only when we compare the increase of transfer transactions with that of transfer accounts (cf. Table 38). Whereas the total transfer transactions on private accounts increased from 16,700.000,000 marks in 1876 to 135,200,000,000 marks in 1900, that is, eightfold, the average amount on private accounts shows only a fourfold increase from 70,600,000 to 333,700,000 marks. Thus on each mark of the average balance there was in 1876 a total turnover of 237 marks, as contrasted with 405 marks in 1900. The same fact comes to light in the following development: the average balance on the different accounts rose from 21,748 marks in 1876 to 23,690 marks in 1900, that is, by about 11 per cent; against this the average turnover per account in the same time increased from 5,100,000 to 9,700,000 marks, that is, nearly double. The increased rate of the return of sums handled in transfer transactions is shown by the average time for which amounts received from private persons on the accounts in question have been left, decreasing from 3 days in 1876 to 1.47 days in 1900.

The utilization of transfer accounts has thus considerably increased; a balance of the same amount serves to-day for a considerably larger number of transactions than twenty-five years ago. The saving in currency is likewise greater. In the total transactions on private accounts and accounts of states, cash payments were saved

to the extent of 41,100,000,000 marks a in 1886, and 136,200,000,000 marks in 1900. Thus on each mark of the average balance there was in 1886 a turnover of 173 marks, effected by crediting, debiting, and transferring, and of 266 marks in 1900.

TRANSFER ACCOUNTS AS WORKING CAPITAL FOR THE REICHSBANK.

It must not be forgotten that the balances, through which so many payments are adjusted, are by no means at hand to their full amount in metallic money. These balances, as already observed, have originated partly from credit granted, in that the value of discounted bills and loans on collateral are not paid out, but entered to the credit of the account. The balances arising from cash deposits can be used in granting credit without increasing the circulation of uncovered notes.

This latter use of moneys on transfer accounts is justified, for the Bank need never fear that all or most of these moneys will be suddenly required (cf. p. 87). A special guarantee against this possibility is the requirement of keeping a certain minimum balance, even though this is not always numerically fixed. These minimum balances can not be drawn from the Bank if the transfer customers do not wish their accounts closed; in the retention of these, especially in difficult and critical times, they themselves have the greatest interest.

The Bank can always depend upon an amount of transfer account deposits considerably in excess of the prescribed minimum balances. In ordinary times, par-

^a A comparison is possible only since 1886, because formerly payments effected by entries to accounts were booked with cash payments.

ticularly if the number of transfer accounts is large, the movements on accounts counteract one another; withdrawals and debits on the one are met by deposits and credits on the other.

This compensating effect is shown also in groups of accounts. Above all, the movements of private and public deposits follow different laws. Frequently one group increases while the other decreases, whereby compensations are brought about.

In one of these groups, namely, public deposits, certain considerable fluctuations are to be noted, which, however, are explained by the composition of these balances. Of their total amount of 146,200,000 marks (on May 7, 1900) as much as 104,800,000, or 71.7 per cent, belong to 9 accounts of more than 1,000,000 marks; 82 accounts were between 100,000 and 1,000,000 marks, with a total of 24,000,000, or 16.4 per cent of the total public balances. The remainder of 11.9 per cent was distributed over 1,685 accounts. Owing to this unequal distribution, a reciprocal leveling of movements takes place only in a small degree. On the other hand, the fluctuations of public moneys take place, on the whole, with great regularity. The close of each month brings, temporarily, heavier withdrawals. Above all, public moneys accumulate gradually in the course of the quarter, reach their zenith in the last week but one, and sink pretty rapidly to their lowest point shortly before and after the close of the quarter.

The steadiness of private balances is clearly much greater. Their movements do not take place with the great regularity of public moneys; the fluctuations are within much narrower limits. The greatest ranges occurring in 1900 between the highest and the lowest amounts were in the case of private accounts between 387,000,000 and 281,000,000 marks, in public accounts between 291,000,000 and 110,000,000 marks.

The greater stability of private balances is due chiefly to their more equal structure. On May 7, 1900, 73,600,000 marks were deposited on 21 accounts, with balances of more than 1,000,000 marks each—that is, only 30.4 per cent of all private balances. These are almost exclusively the balances of banks and bankers. On 561 accounts there were balances between 50,000 and 1.000.000 marks, which represented 90,900,000 marks, or 37.6 per cent of all private balances; they are likewise mainly bank accounts. The 13,168 accounts, with balances from 1,000 to 50,000 marks, represent 77,300,000 marks, or 31.9 per cent. These numerous accounts—so trustworthy for this reason for the Reichsbank-of the middle merchants, and of the industrial and agricultural classes are important elements for maintaining the regularity of balances.

Of especial importance is the fact that not only do transfer payments to a certain degree counteract one another in their effect upon the amount of the Bank's transfer moneys, but a similar equalization takes place between the customers' moneys on the one side and note circulation on the other. For the policy of the Bank the greatest possible regularity of demand liabilities, including note circulation, is desired; the greater the fluctuations the more difficult the Bank's task of making the greatest possible use of the funds at its disposal (which,

after all, is to the interest of the entire economic system) and of maintaining in all cases a sufficient cash reserve. The total daily obligations of the Bank have been greatly augmented by transfers; in 1900 there was added to an average note circulation of 1,138,600,000 marks an average amount of customers' moneys of 512,700,000 marks, so that the sum of demand liabilities was 1,651,300,000 marks. On the other hand, the fluctuations of total demand obligations have not increased correspondingly. The movement of customers' moneys is dependent on factors other than those on which depends the movement of the note issue; the high and low points in these two most important liability items occur at different times. The result is far-reaching and compensating. The difference between the highest and lowest amount of all demand obligations was, with the exception of one year, smaller according to percentage than the difference between the maximum and minimum of note circulation. In seventeen out of twenty-five years the absolute difference was smaller in the case of the total demand obligations than in the case of notes.

The compensating effect is still more striking when we compare the note issue not covered by reserves with the demand liabilities likewise not covered by reserves (Barvorrat; see footnote, p. 80). With the exception of two years (1884 and 1899), the difference or "range" is greater in the case of note circulation than in the case of notes and customers' moneys. The most farreaching compensation took place in 1892, in which the "range" of uncovered note circulation amounted to 415,000,000 marks, while that of uncovered notes and customers' moneys together was only 197,000,000 marks.

Thus the moneys of transfer accounts are not only subject to proportionately small variations, and therefore capable of an intensive use in granting credit, but they increase the steadiness of all the funds at the disposal of the Bank, and render possible a more rational use of note issue.

The same balances which form the basis of transfer transactions of 164,000,000,000 marks have raised the funds at the disposal of the Bank for granting credit by hundreds of millions of marks. They have made possible to the Reichsbank the great expansion of its bill and collateral loan business, which was rendered necessary by the rapid and brilliant development of German economic activity during the last quarter of a century.

CLEARING HOUSES.

THE DUTIES OF A CLEARING SYSTEM.

The transfer system received an exceedingly important complement through the method of clearing suggested and carried out by the Reichsbank. Settlements can be facilitated through transfers only in so far as the payment operations are concentrated at a single bank. The replacing of cash payments by transfer transactions on transfer accounts—i. e., by entries to the accounts—is possible only between clients of one and the same bank. But where several great banks at one place, each with an extensive clientele, share in the monetary transactions the transfer system is not sufficient. Here it is a question of facilitating the settlement of claims and obligations continually arising between a number of banks.

Such a need has been felt at those places where the public intrusts the management of its accounts to banks, and makes most of its payments not in cash, but by checks on its bankers. This is especially true of England and the United States of America, and therefore at an early date the clearing system was organized in these countries.

In Germany, on the contrary, the check system has developed slowly. Apart from Hamburg, the check system has not established itself in small business circles in the same degree as has the transfer system of the Reichsbank. This development is due to the fact that payments through German banks are based chiefly on the transfer system of the Reichsbank, in whose extended network of branches transfers find a strong support.

The lack of a German check law proves to be a further obstacle to development. The steps taken to bring about a legal regulation of this subject and the passage of a check act have thus far not met with the desired success.

ESTABLISHMENT AND ORGANIZATION OF CLEARING HOUSES IN GERMANY.

Through these circumstances the systematic arrangement of a clearing system has been delayed in Germany, until in 1883 the Reichsbank, in developing further its transfer system, seized the opportunity of establishing a system of clearing offices. The principle of this arrangement is that the representatives of the participating banks meet at a certain place (the clearing house) at a certain time, exchange their bills, checks, etc., and after an examination of the same at the home bank, credit and debit one another at a second meeting, so that not each single item, not even each single "charge," need be paid in

cash; only the final balances need be adjusted by cash settlements.

In this way a single bank does not, as in the transfer system, act for all others, but all participating banks take part in an equal manner, and in common procedure, in winding up the business. The Reichsbank is a creditor and debtor at all clearing places; that is, demands for and against the Reichsbank come up for settlement. It acts, besides, as a leader of the clearing system and as "the bank of banks," since the final balances are adjusted by crediting and debiting the transfer accounts of the Reichsbank, so that no cash payment whatever takes place.

The first clearing house was established in Berlin according to the agreement of February 14, 1883. Frankforton-the-Main, Stuttgart, Cologne, Leipzig, Dresden, and Hamburg followed suit by establishing similar institutions in the same year; in 1884 Breslau and Bremen did the same. The last to be established was in Elberfeld (1893). These clearing houses are legally bound by mutual contracts to all the other banks and to the Reichsbank. The Berlin plan was a pattern for all. The consideration of special local circumstances has, however, caused numerous differences, which consist in the limitations of clearing matter, in the number of daily meetings, and so on. principle is that each creditor first clears directly with his debtor; the final settlement of the remaining outstanding claims is made—as already mentioned—not in cash but by means of transfers on the Reichsbank. The delivery of an item is regarded as due presentation for payment within the meaning of the civil law, and its settlement in the clearing procedure is regarded as payment.

A "return," therefore, need not be presented again at the debtor's place of business, but can be immediately protested for nonpayment. The representation of the members by specially designated deputies or clerks is permitted. The Reichsbank provides the business premises, the other costs being borne equally by all participating banks.

The banks taking part at clearing houses have, in an attempt to find a substitute for the nonexistent check act, agreed upon a common form of check (draft). By means of the written or printed addition "to be debited only" ("Nur zur Verrechnung") crosswise through the text, the character of an "order-to-book" draft can be conferred on the check; that is, it may not be paid in cash, but may be applied only to debiting the account of the drawee or of another member of the clearing house. In close connection with the above is the provision the special purpose of which is to increase the check business, according to which the members bind themselves to accept checks on other members of the clearing house, not merely from their customers but also from other firms in the locality.

The establishment of clearing houses has been carefully provided for; the regulations of the Reichsbank regarding bills remitted for collection for transfer accounts, and especially the rule that acceptances by holders of transfer accounts shall be made payable at the Reichsbank or at a bank which clears daily with the Reichsbank, help to compensate for the activity of these institutions.

This organization, like the whole arrangement of clearing houses, has turned out extremely well. The cool attitude, opposition even, of banking houses at various

places has led to the general conviction that clearing houses represent a salutary and important step forward in monetary transactions and have become indispensable for economic life.

DEVELOPMENT OF THE CLEARING SYSTEM.

The returns which are published monthly in the Reichsanzeiger for all ten clearing houses, along with the weekly statement of the Reichsbank, show a slow but steady increase in the number of items and, apart from the temporary decline of 1890 and 1892, in the amount of debited sums. Whereas in 1884 the number of items amounted to 1,979,012 and the value to 12,100,000,000 marks, the year 1900 showed 5,186,237 items for 29,500,000,000 marks, the number of members having increased in the same time from 112 to 126.

The compensating effect has also improved. Its extent is very different at the various clearing houses. It is greatest at Hamburg, where in recent years about 94 per cent of all deliveries counterbalanced, so that it was necessary to settle only 6 per cent on transfer accounts.

If German clearing houses have thus far remained behind their prototypes, the English and American clearing houses, in their development, the reason lies in the fact that checks become naturalized slowly in Germany, whereas in those countries they have already become a normal medium of payment. In distance transactions it will never be possible for checks to become in Germany a prevalent medium of payment. In Germany settlements from place to place are carried out through transfers by entries in the books of the Bank, while in those countries

settlements are effected by checks, payment on which is obtained through the clearing house.

Transfers and clearing houses are mutually complementary and form a complete unit. All payment transactions, if they pass through the hands of bankers at clearing houses, are effectively examined, and, so far as they do not counterbalance, are finally adjusted on the transfer accounts of the Reichsbank.

DEPOSITS AND DRAFTS.

In addition to transfers, the Reichsbank carries on a number of related liability transactions, the importance of which, however, in consequence of the development of transfers, has been forced more and more into the background.

ACCEPTANCE OF DEPOSITS.

The Reichsbank is, as in the case of sums for transfer, unrestricted in receiving deposits bearing no interest, but in the case of interest-bearing deposits it is limited to the amount of its capital stock and reserve fund. In the contract of May 17–18, 1875, concerning the cession of the Prussian Bank to the Empire, the rights and duties of the Bank, existing since October 5, 1846, regarding the investment of trust moneys, and of the funds of churches, schools, hospitals, charitable foundations, and public institutions, had been transferred to the Reichsbank, the right of giving notice being reserved to both sides. The Reichsbank at first accepted voluntarily, as the Prussian Bank formerly did, deposits from guardians, legally appointed trustees (*Pfleger*), and private persons. The rate of interest for the different classes of deposits varied, and ran to

2 and 3 per cent. As early as February 1, 1876, however, notice of withdrawal of trust moneys was given to the Reichsbank by the Prussian government. As mentioned (cf. p. 88), the withdrawal of these funds was one of the reasons for a speedy reorganization of the transfer system. In consequence of the rapid development of this new branch of business and the influx of noninterest-bearing moneys, the Bank soon had no proper use for the interest-bearing deposits remaining with it. On November 26, 1878, it therefore made use of its right to give notice to the government of Prussia with regard to these deposits, and the sums in the Bank's hands were paid out during the year 1879. Since that time the Reichsbank has had only noninterest-bearing deposits.

These are distinguished from transfer moneys in that they are not demand liabilities; an eight-day notice of withdrawal is necessary for their repayment. The difference is, however, of a purely formal nature, as the bank officers are authorized to allow depositors to dispense with the observance of this notice, and these moneys have up to the present always been promptly paid at the desire of depositors.

Furthermore, deposited money can be withdrawn only at the place where it was deposited. With the depositing of moneys at the Bank and the disposal of them by the depositors traditional formalities are connected.

This whole branch of business has been retained along with the transfer business in order to serve such persons and public authorities who want to have their capital in safe custody for a short time without demanding interest or further service of any kind from the Bank. Since transfer accounts, because of the more convenient and extended right to dispose of the moneys, are far more advantageous than noninterest-bearing deposits, the importance of the latter was certain to disappear gradually (cf. Table 43). The amount of noninterest-bearing deposits diminished from 1,164,172 marks at the close of 1876 to 319,882 marks at the end of 1900. The temporary increase of deposits and total transactions in the years 1885–1896 is attributable to the fact that since 1885 money has been deposited for the royal general lottery treasury (Königliche Generallotteriekasse) by persons keeping lottery offices; since 1896 transfer accounts have been opened for the latter, and deposit business has in consequence sunk to its present low state.

At the end of 1900 the deposits were distributed over 191 accounts, of which 92 were kept in Berlin and 89 in Cologne, while only 10 belonged to all the other branches of the Bank. In Cologne the deposits are mainly residues of trustee funds; a few are private deposits by persons of whom all trace has long since been lost. The amounts are insignificant, only a few exceeding 100 marks; one account is for 10 pfennige, another for 5, and a third for only 3.

The Civil Code has allowed (section 1808) that cash sums belonging to minors or wards be deposited at the Reichsbank under certain conditions (cf. p. 332).

DRAFTS.

Drafts which permit the paying in of a sum in order to have it paid out again facilitate payment operations for those for whom a transfer account is not worth while.

Drafts had been fairly important at the Prussian Bank. But several objections, especially forgeries and losses, have had the effect of limiting the employment of drafts as orders to pay at sight and of substituting for them another method. All independent branches of the Bank and those suboffices managed by two officials accept since 1876, at a charge of one-fifth per thousand, just as do postoffices in issuing postal orders, sums to be paid to third persons through another of the branches. But no longer, as formerly, does the Bank hand to the person paying in the sum a draft (or order) which can be given to the third person and through which the latter can obtain the amount at the given branch. The person paying in the amount receives only a receipt, and the receiving branch arranges for payment to the proper person through a letter of advice to the paying branch. are now supplied to the public only in exceptional cases and on special request.

This whole branch of business, which for simplicity we may call the 'draft system' (Anweisungsverkehr), has not attained great proportions in the case of the Reichsbank. The most important receivers of payments make use of transfers, and for them this inconvenient procedure, involving a fee, is superfluous. Since 1891 the sums dealt with have increased, owing to the fact that for a time this branch of business was extensively used by the treasuries of Prussia and by the Rentenbanken (royal banks endowed with state money for making loans for the improvement of land). A larger increase in 1895 is partly attributable to changes in booking. But through the gradual but constant connection of public treasuries

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with the transfer system, transactions in this line have again considerably declined. The lowest return was 36,700,000 marks in 1884, the highest 348,200,000 marks in 1895; in 1900 the return was only 58,000,000 marks.

LETTERS OF CREDIT.

Little use has been made up to the present of another arrangement, the letter of credit. The Reichsbank grants simple and circular letters of credit with a validity of at most six weeks on all its independent branches. The letters are granted to persons applying for them not only on cash payment in advance, but also on credit created by deposits of loanable securities and discountable bills. These letters of credit are recommended in cases where a business man, in the course of business at one or more places abroad—for instance, at the wool markets—has to make cash payments, the amount of which can not for the time being be exactly determined.

CHAPTER V

THE PURCHASE AND COLLECTION OF BILLS AND SECURITIES.

IMPORTANCE OF BILL PURCHASES FOR THE REICHSBANK AS THE CENTRAL BANK OF ISSUE.

The most important assets of banks of issue are discounts on bills. Their notes may be presented daily for redemption, and the sums deposited with them, principally through transfer transactions, may be redemanded daily. Since in experience, however, such presentations and demands are not made all at once and suddenly, the banks are not forced to hold full cash cover for all demand liabilities, but can invest at interest a part of such moneys and notes. This investment must, however, be safe, and the banks may put out their funds only for short periods, in order that, on the one hand, their claims becoming due, and, on the other, the presentation of notes and the cash withdrawals may balance so far as possible. That is attained most easily by investing in bills which have only a short time to run. The Bank Act therefore prescribes (sec. 17) that the Reichsbank must hold ready, for its notes not covered by cash, discounted bills maturing at the latest in three months, on which, as a rule, three, but at least two, solvent parties are liable. Departing from the Prussian Bank regulations of 1846, which admitted as cover for one-sixth of the notes in circulation not only bills but also claims on collateral loans (Lombardforderungen), the Bank Act recognizes in addition to cash holdings (see footnote, p. 80) only bill investments as subsidiary cover for notes (cf. p. 29ff.).

The Reichsbank purchases bills both on inland and foreign places. In the nature of things and of the general national economic tasks of the Reichsbank, most of the bills (on an average about 99 per cent) in its possession are payable at home.

The mission of the Reichsbank is, first of all, to satisfy the domestic demand for credit, and to utilize by bill purchases for domestic enterprises the moneys flowing to it during national economic activity. The principle of not buying bills from foreign firms must also be judged from this national economic point of view.

The Reichsbank has never made use of the right conferred on it by the Bank Act (sec. 13) to dispose of its bills on inland places. Endowed as a central bank of issue with considerable funds of its own and with far-reaching powers, it is the strongest and last source of credit in the land; it can not, like other banks, make claims for credit on a higher institution (cf. p. 41).

The Reichsbank must publish its current rate of discount (Bank Act, sec. 15). The central committee must be consulted regarding the discount rate to be fixed by the Reichsbank Directorate, and the changes in the regulations and periods for which credit is granted; the weekly statements of holdings in bills must also be submitted to the committee for inspection (sec. 32).

GENERAL PRINCIPLES.

The general principles according to which credit is granted by the Reichsbank in the purchase of bills correspond almost exactly to the old regulations of the Prussian Bank. In one important particular, however, the Bank Act of March 14, 1875 limited the more liberal regulations of the Prussian Bank Act of 1846.

MORE THAN ONE PARTY LIABLE ON A BILL.

The following provision held good for the Prussian Bank, namely, that of the parties liable on each purchased bill, three as a rule must be known to be solvent. Whereas in the Prussian Bank Act departures from this rule were not subject to restricting regulations, and the Bank might therefore in exceptional cases discount bills with only one signature, the Bank Act of March 14, 1875, prescribed the guarantee of at least two parties. The ordinance of the head of the Prussian Bank in section 5 of the official instructions of November 24, 1829, permitted the Prussian Bank to purchase unaccepted drafts from reliable parties. This regulation was not affected by the Bank Act of 1846, and was finally set aside by the provision of the Bank Act of 1875. In this innovation lies greater security of the Reichsbank's bills as compared with that of the Prussian Bank. The unconditional insistance upon the liability of several, at least two, guarantors, who may not belong to the same business company, reduces the risk for the Bank.

The provision reckons with the possibility that the most careful and wealthy debtor may, before the day of maturity, get into a position which makes doubtful the prompt fulfillment of his liabilities.

COMPULSORY ACCEPTANCE.

The Reichsbank insists, just as did the Prussian Bank, that a bill reaching its office be supplied with the acceptance of the drawee. All bills payable at the place of purchase, also bills domiciled for consignment, must be accepted when handed in. On the other hand, the Reichsbank presents consigned bills, which are payable at the residence of the drawee, for acceptance after purchase.

It need not be said that the bills purchased by the Bank must agree with all provisions of the bill regulations and the legal regulations with regard to bills at foreign places. Whereas the Prussian Bank Act (sec. 2) of 1846 expressly permitted the discounting of drafts, the Reichsbank is not allowed to purchase such drafts, letters of credit drawn on one person at one place (Accreditiven), mandates, and other orders to pay, which are not bills.

CREDIT CAPACITY OF THE PARTIES LIABLE ON BILLS.

Besides the number of signatures, the test of solvency (bonté) of the parties liable on the bill is of greatest importance to the Reichsbank; the security of claims acquired through bills depends in the first place upon the ability of the party to pay. This gives the Bank the assurance that the bill will be paid in cash on the day of maturity. The persons taking credit must be well known to the executive officers and must be known as reliable. For this reason, the branches may, as a rule,

discount bills only for such credit-seeking persons whose residence is in their business circuit.

As to the amount of personal credit which the Reichsbank grants to persons or firms enjoying its discount policy, the pecuniary circumstances and the personal qualities of the persons, also the nature and extent of business, are determinative. The branches must send to the Reichsbank Directorate suggestions for the determination of credit. When it is a question of larger credits in provincial branches, the advice of the deputies (Beigeordneten) of the main branch in the circuit to which the branch in question belongs must be sought. Credits are finally fixed by the Reichsbank Directorate. Firms which, according to their circumstances or the character and reputation of their members, are not deserving of confidence are not allowed to do business with the Reichsbank.

A well-organized information bureau at the various branches determines the "capacity for credit." Information is gained through personal relations of the executive officers with the commercial class, by inspection of the balance sheets of the persons obtaining credit, and by other means. The officers observe the strictest silence with regard to any matters of credit coming to their knowledge.

CONTROL OF CREDIT.

The branches keep perfect control, through their books, of the actual use of the personal credits granted, and this control permits at all times a survey of the total liabilities on bills of each person taking credit at the Reichs-

bank, also of the total sum for which each person is debited with bills.

CONSIDERATION OF THE BUSINESS NATURE OF THE BILL.

The actual censorship of bills by the Bank extends not only to proving the solvency of the parties liable on the bill, but also to the business origin (the nature, causa) of the bill offered for discount. The knowledge of the economic purpose of the bill, also of the circumstances to which it owes its existence, is of great importance in judging the certainty of its redemption on the day of maturity. In general, the requirements of the Bank are met only by a bill which, in the moment of its formation, starts from a completed transfer of property between the parties liable on it and is destined on maturity to balance this transfer. This is especially true of so-called merchandise bills (Warenwechsel). Such bills, which originate in the purchase or sale of merchandise, are an investment specially suitable for the Reichsbank, since the goods which are delivered into the hands of the debtor as equivalent for the bill are by nature suitable for quick turnover. The resale of them gives the debtor funds for the redemption of the bill on maturity. Under similar conditions, bills based on purely credit transactions (Kreditwechsel) are unobjectionable to the Reichsbank for discount. even though the significance of the credit operation expressed by the bill is not always easy to determine; special care is therefore necessary in the purchase of such bills.

On the other hand, the Reichsbank must try to exclude from its portfolio all bills which do not arise in the abovementioned transactions. It has, like its predecessor, declined to purchase accommodation bills, jobbing bills, and financial bills, the creation, acceptance, and indorsement of which are solely to get the necessary number of guarantee signatures for raising funds or for speculation purposes. This definition includes also direct drafts drawn with the same intention between banking houses for long terms, also those bills which can not be based on business transactions on account of the vocation or business of the guarantors.

MODIFICATIONS.

These principles were subjected at the time the Reichsbank began its activity to certain modifications introduced from the Prussian Bank. Those most noteworthy (from the year 1856) facilitate considerably the transactions of farmers with the Bank. Bills proceeding from rural trades, i. e., the purchase of grain and potatoes for distilling, of oil seeds for oil mills, or the sale of wood, grain, spirits, etc., may, even without a business man as guarantor, be discounted for landowners when the security is unquestioned. In exceptional cases, during times of an ordinary demand for money among landowners, the Bank may buy also such bills as do not proceed from agricultural business, but are drawn only to meet temporary money needs.

FURTHER DEVELOPMENT OF PRINCIPLES IN ACCORDANCE WITH ALTERED CIRCUMSTANCES.

The innovations and changes effected during the last quarter of a century in the principles governing the granting of credit in accordance with the terms of the Bank Act, served to consolidate and perfect the system, and to adapt the latter to the needs of business, which was ever developing and changing. Above all, the Reichsbank had to guard its position as central bank of issue, and to assure itself of a considerable part of the domestic circulation of bills, not only with the intention of keeping its invested capital and its profits at a corresponding height, but chiefly to carry out the tasks assigned to it. For this purpose it must have an adequate and continuous insight, gained from its own observations, into credit demand and credit supply.

DISADVANTAGES TO THE REICHSBANK OF MUTUAL COLLECTIONS OF PRIVATE BANKS.

This insight was, however, threatened in the first years of the Bank's existence by the so-called interchange of collection (*Inkassoaustausch*) of private banks and bankers, and also by the increased competition of private discounters, above all of private banks of issue.

Previous to 1876 private banks and bankers used to discount at the Prussian Bank, shortly before maturity, all bills which were drawn on *Bankplätze* (bank places, places possessing a branch authorized to deal in bills) and which were not payable at the place of purchase. Although such bills were liable to a discount of at least ten days, the discounting was recommended in those cases in which the seller was concerned more in cashing the bill than in obtaining credit, since an equally favorable medium for collecting did not exist elsewhere. A complete revolution took place after the establishment of the Reichsbank's transfer system. Many private banks and bankers at various places combined in a sort of cartel in order to

send to one another for collection, for an extremely small commission, their bills on the places in question. The conveyance of the equivalent, which hitherto had caused considerable outlays for postage, could now be effected without cost by entries on transfer accounts by means of red checks. Moreover, many banks did not even put themselves to the trouble of having the bills presented by their own messengers, but turned them over to the Reichsbank for gratuitous collection and for entry on the transfer account (cf. p. 96).

The short bills previously allowed to the Prussian Bank as material for discounting were almost entirely withdrawn from the Reichsbank, its discount profits were diminished, and the survey of important credit operations was rendered difficult; the real expenditure of trouble, however, was in many cases demanded the same as before. The banks themselves were urged to adopt the procedure described, whenever a need for credit caused them to discount since the collection could be made much more cheaply through the interchange than by negotiation at the Reichsbank with a deduction of ten days' discount. For the Reichsbank, therefore, the arrangement became uncomfortable, especially in times when money was plentiful, even though the intrinsic worth of the new, practical, and advantageous arrangement could not be mistaken.

COMPETITION OF PRIVATE BANKS OF ISSUE.

The leading position of the Reichsbank in the money market was threatened, especially in times of easy money, by the competition of private banks of issue more than by the interchange of collections. The economic

standstill at the end of the seventies resulted in money being plentiful, and private financiers put the moneys coming to them at the disposal of the market in bill purchases, at interest rates much lower than the official discount rates of German banks of issue. Even foreign central banks of issue, the Belgian Bank and the Bank of Austria-Hungary, had invested large amounts in the German market at low discount rates, and had thus forced the Bourse discount still lower. Several private banks of issue, mostly South German, had adopted the pactice of using, in addition to the interest rates published by them in accordance with the provision of the Bank Act, also a reduced rate, almost the same as the discount in the open market, at which they discounted large bills at long date from so-called "first houses." The result was that the funds of the Reichsbank lay idle. and its insight into the credit transactions of the land was considerably limited by the fact that the largest and best bills did not come into its hands.

INTRODUCTION OF A PRIVATE RATE FOR THE REICHSBANK

If the Reichsbank did not wish to be forced out of the bill market, it had to adopt the practice of the private banks of issue; this appeared all the more imperative since it might hope to attract also such bills at long date which, as a result of the interchange of collection among private banks of issue, no longer came into its hands shortly before maturity. The innovation was, at its introduction in January, 1880, at first limited to those branches where there was a Bourse-like trade in bills, but was extended shortly afterwards, according to the

wishes of many chambers of commerce, to all independent branches. Even through the agency of suboffices, bills might be handed in for discount below the official bank rate; this was at first allowed, however, at somewhat higher rates than at the independent branches. At first, the fixing of the preferential rate, which could be employed only in the purchase of bills "good" on the Bourse, was permitted to the branches provided that the rate in no case be lower than the current rate on the Berlin or Frankfort Bourse. The latter obtained only for places in South Germany. As early as April of the same year, however, this regulation, which was being abused, was rescinded, and the fixing of the authoritative minimum discount below the Bank rate was made uniform for all branches by the Reichsbank Directorate. The requirements regarding the quality of the bills purchased at the preferential rate were also made uniform as early as 1880; after several changes the requirements provided that only such bills, which, as a rule, have fully six weeks to run, which are for not less than 3,000 marks, and which have signatures representing a high "credit capacity," could be purchased below the official bank rate.

The purchase by the Reichsbank of bills below the official rate encountered strong hostility, particularly from those bankers with whom the Reichsbank entered into competition in the purchase of such bills; the bankers had formerly been alone in the market as purchasers for their own and their patrons' accounts. This point of

a These principles could be departed from only in exceptional cases—when large bundles of bills were handed in, among which were odd ones with a somewhat shorter time to run or for somewhat smaller amounts,

view also found eloquent support in the Reichstag. The fact was disregarded, however, that not the least of the reasons which had compelled the Reichsbank to employ cheaper rates in discounting was just this interchange of collections among bankers; after the procedure of private banks of issue, no other course was open to the Bank than to follow the practice carried on by them if it wanted to invest safely and properly its idle funds and retain its previous influence on the money market. Nevertheless, the Bank has, from the beginning. regarded it as a duty not to seek bills for purchase below the bank rate, but to have such bills come of their own accord, and to avoid even the appearance of seeking such bills. Drafts on bankers, which we may assume are only to provide working capital at a low interest rate for the person offering them for discount, are excluded on principle from purchase at the private discount. Furthermore, the Reichsbank has never bought bills at its chief office in Berlin at a rate lower than that of the prevailing official bank discount. Since 1881, in fact, it has always discontinued purchases at the preferential rate on those occasions when its official bank rate had risen to 5 per cent or higher, or when foreign rates of exchange allowed shipment of gold abroad.

There can be no doubt that the discounting of bills below bank discount has by careful management helped to maintain for the Reichsbank the survey of bill circulation so necessary for a central bank of issue. The easily regulated private rate of discount enabled the Bank to be in constant touch with the money market and to influence the movements of the latter according to the exigencies of the case. Its sway over the market will be all the greater, however, the more it follows the movements of the money market and the more the demand for credit becomes accustomed, even in times when money is plentiful, to seek and find satisfaction at its hands. Only when the discount transactions of the Bank are heavy in times of easy money, can we be sure, in case of a threatened drainage of gold or under other circumstances which make the raising of the interest rate desirable, that the Bank will exercise the desired effect on the discount rate of the Bourse.

THE GRANTING OF CREDIT TO SMALL BUSINESS PEOPLE.

From the very first the Reichsbank has, like the Prussian Bank, recognized its duty of serving, so far as indispensable conditions are fulfilled, the national economic system uniformly at all its branches. The Bank has therefore not confined itself to the fields of commerce and industry, but has expressly directed that craftsmen, artisans, and persons following similar occupations, that is, the small industrial middle class, be admitted to direct bill business as well as merchants and manufacturers, although the Bank did not fail to see the difficulties which were sure to appear. At an early date (1878) its terms for credit were made This change was chiefly for the good of the above classes, since it reduced considerably the minimum amount of security required for the granting of credit. however, direct discounts with small tradespeople remained within narrow limits. The reduction in the requirements with regard to wealth benefited only the more wealthy of them; it was impossible to help them further on account of note issues. Moreover, the occasions for direct discounts with smaller tradespeople are rare, for these persons have practically no suitable material for discounting. The formal lack of a second signature, which was frequently the case with such bills, made impossible for the Reichsbank the direct purchase of bills from small trades, that is, of bills originating in the lowest stratum of industrial life. The immediate satisfaction of the credit requirements of these classes, so far as bill discounts are concerned, must therefore be left by the Reichsbank to other factors.

BILLS FROM COOPERATIVE SOCIETIES.

Indirectly, however, the advantages which the Reichsbank can grant could be supplied to these small business people and to farmers—who in this matter are on the same level-not only in that the Reichsbank discounted for private bankers bills coming from the aforementioned classes, but above all in that it paid the greatest attention to the system of cooperation. The Prussian Bank had shown special willingness to oblige cooperative societies (Genossenschaften) by conceding to them an exceptional It is true that in the case of cooperative societies their own wealth, original shares, and reserve fund, remained the real foundation for credit; at the same time, however, the unlimited joint liability of the members could be taken into account and credit could be granted up to a considerably greater quota of the wealth of the cooperative society.

The new act of May 1, 1889, concerning industrial and economic agricultural cooperative societies (*Erwerbs und Wirtschafts-Genossenschaften*) disregarded the principle

of the unlimited liability of societies by putting those societies with limited liability on the same footing as those with unlimited liability. In the case of the limited liability societies, the Reichsbank had at first acted in accordance with strict general principles—a procedure justified as long as experience with this new matter was lacking. These experiences, however, proved to be favorable. Numerous cooperative societies, especially loan societies (Vorschussvereine), were transformed into societies with limited liability, without experiencing any deterioration in their condition. On the contrary, it was often perceived that through energetic exclusion of unsafe elements and the admission of numerous well-to-do persons who, not unjustly, had fought shy of the former unlimited liability, the associations gained strength. There was no further ground for differential treatment; since 1896 the Reichsbank has ceded to the larger cooperative societies of the new kind the same exceptional position as in the case of the larger cooperative societies with unlimited liability. The facilities mentioned have obtained from the very first for cooperative associations with unlimited contributory liability (Genossenschaften mit unbeschränkter Nachschusspflicht).

EXTENSION OF THE NETWORK OF BRANCHES AND COLLECTING DISTRICTS.

The Reichsbank's business in bills was also sure to increase through steady extension of its network of branches, especially through the establishment of numerous suboffices. Many business people have always obtained discounts from the branch of their circuit even when they have not lived in the town itself. These discounts

are readily and frequently granted by the Bank, but they are, it must be admitted, rendered difficult by the necessary form of correspondence. These business connections are greatly facilitated by the establishment of a suboffice at the customer's actual place of residence. It is of greatest importance that just at these small branches the close and permanent relations with the business world, and the direct knowledge of personal qualities and pecuniary circumstances, so important for a credit system, are greatly advanced. Not only does the discount business at the place increase, but the place itself becomes a "bank place"; bills on the place become "bankable," and thus, simultaneously, the material for discount at the provincial branches is increased. This is an advantage not only for the Reichsbank itself, but also for trade generally.

Not less important for an increased claim on the services of the Bank in discount business was the extension of the so-called collecting circuits (*Inkassobezirke*) of the various branches. The number of streets in which the Reichsbank does not present bills for payment has in the course of time become smaller and smaller. The Bank has in numerous cases been ready to include outlying suburbs in its collecting district.

ACCEPTANCES OBTAINED GRATIS.

A further concession to the public served to counterbalance in discounts a difficulty caused by the Bank Act. The provision that only bills with at least two signatures may be discounted has made it impossible for the Bank to purchase unaccepted drafts direct from the drawer. The Prussian Bank, which was allowed to do this (cf. p. 127), insisted, on bills payable at the place where the purchasing

branch was situated, that the drawer—resident at the place—previously obtain acceptance. In the case of consigned bills (Versandtwechsel), that is, those payable at another branch, it collected the acceptance subsequently, just as in the case of other unaccepted bills, even when several parties were liable on these bills. caused the Bank much less trouble than the drawer, as in any case it sent the bills immediately after purchase to the branch office at the place of payment. The offices of the Reichsbank sought to do away with the inconvenience to its discount customers in the new legislation by taking for previous gratuitous acceptance bills destined for discount and discounting for the drawer only when advice of the effected acceptance had arrived from the office at the place of payment. This procedure, after being for a long time limited to exceptional cases on account of excessive burdens in many offices, was expressly and universally permitted in 1886. The Reichsbank acted on the theory that it must counterbalance by greater efforts the difficulty created by the act if it would not suffer a curtailment of its material for discount.

REDUCTION OF THE MINIMUM TIME THAT BILLS HAVE TO RUN AND OF THE MINIMUM DEDUCTION IN DISCOUNTING

Other facilities in the purchase of bills, which are of importance not only in banking but also in general economic policies, followed in the year 1886.

For consigned bills—that is, bills not payable at the place where discounted—which are of an individual value of 20,000 marks and more, or in lots of at least 30,000 marks with an individual value of not less than 5,000 marks, five days' interest was to be the minimun, instead of ten

as formerly. A year later this favorable rule was extended to single bills for at least 10,000 marks and to lots of at least 20,000 marks. For local bills (Platzwechsel), the minimum deduction, formerly customary at the Prussian Bank, of four days' interest for shorter bills, was retained. The smallest deduction for each single "appoint" of 100 marks or less was reduced from 60 to 30 pfennigs both for local and consigned bills, and to 50 pfennigs for all other bills. The Reichsbank hoped through these facilities to attract just before maturity those large bills which were not given to it at long date, without interfering in any way with the competition of other banks for bills of longer date. Only by assuring itself of a certain share in the German bill trade could the Bank maintain and strengthen its dominating position over the money market. Through the reduction of the minimum the mutual interchange of collections between private banks was decreased in the interest of the Reichsbank, while the discounting of those bills—that is, the immediate payment, or crediting an account, of the amount of the bill less the insignificant minimum interest to be deducted was as advantageous as crediting the account, without commission, for the whole amount on the day of maturity. Thus the Reichsbank intended through these measures to achieve the success which the Bank of France had attained decades ago, namely, to concentrate at its own offices the total traffic in short bills, not only because it obtained a full survey of commercial transactions, but chiefly because short bills form the most liquid and therefore the most suitable interest-bearing investment for a large bank of issue.

In addition, a social-political point of view caused the Reichsbank to reduce the minimum rate for bills of 100 marks and under; it intended through this regulation to facilitate business in small bills, as far as lay in its power, in order to urge upon German retail business the employment of short bills for the settlement of debts in place of the universally customary credit system—the settlement by means of book debts. At the same time it made it possible to collect smaller bills, which is far more advantageous than collections through the mails by means of the so-called postal order (Postauftrag). Not only is the latter considerably dearer but it is coupled with a small loss of interest, since the post-office pays the equivalent only on receipt of the amount of the bill, whereas the Reichsbank pays earlier, immediately on discounting. Above all, however, the post-office, in contrast to the Reichsbank, gives no guarantee for protesting the bill in due time and in proper form in case of nonpayment.

REPEAL OF A SEVERE OBSOLETE PROVISION.

Of far less importance than these facilities in discounts was the repeal, in accordance with changed business customs, of a severe measure taken over from the Prussian Bank—a measure which combatted an abuse deeply rooted in business life. According to this measure unaccepted bills under 150 marks, even when they bore the clause "in case of nonacceptance do not protest" (Mangels Annahme ohne Kosten), were protested in case of nonacceptance. Such bills, which were free from stamp duty until the passage of the law of the Confederation of June 10, 1869, were, even after the introduction of compulsory

stamping, frequently used solely for procuring money. The many small drafts remaining without acceptance, especially those on bankers, were a veritable plague. Since this regulation attained its purpose even in the days of the Prussian Bank, the Reichsbank found it possible to repeal it in 1876. Only in the Rhineland and Westphalia, where the old abuse was not yet done away with, was it necessary to maintain the regulation for a time; in 1880, however, it was dispensed with even here.

PRECAUTIONS AGAINST THE FORGING AND MISUSE OF DOMICILED BILLS.

If, on the one hand, the Reichsbank, through the above measures and through other facilities and regulations of its discount business, had taken into account the altered conditions of business, it could not, on the other hand, neglect to meet effectively an improper or fraudulent use of its arrangements. Precautions were necessary against the forging of domiciled bills, through the purchase of which the Reichsbank has repeatedly met with considerable losses. Bills of that kind, supplied with a forged acceptance and intended for "kiting" purposes (Geldmacherei), are generally made payable to the drawer himself or to another person having connections with him. Even in case of repeated prolongation the forgery could remain undiscovered, as the bills were taken up again and again by the drawer himself or by that third person, ostensibly in the name of the drawee, and so the drawee himself knew nothing of the whole affair. insolvency of the drawer first revealed the "kiting" and often a long succession of forgeries; the Reichsbank itself suffered particularly heavy losses when it had bought the

bill direct from the drawer without a further guarantee signature, in the belief that the acceptance was genuine. Even before this time the attention of the Bank had been repeatedly drawn to such bills; the Prussian Bank had already taken precautionary measures. The Reichsbank was forced to take sterner action, and in 1892 directed that in the case of these bills the drawee be informed of the existence and the purchase of the bill by the Reichsbank. These provisions have met with strong approval in those circles of the business world having connections with the Reichsbank, as they secure not only the Reichsbank but also the public against forgeries involving great losses.

The discounting of domiciled bills requires a specially watchful eye for another reason. Bills are sometimes made payable without any discernible cause at a "bank place" far distant from the place of residence of both the drawer and the drawee, in order to hide impure credit operations, bill jobbing, and the like, and to deprive the officers of the Reichsbank of the insight into the conditions and credit transactions of the circuit. In all such cases since 1883 appropriate information is sent from the purchasing branch to the branch in the circuit of the drawer and the drawee, so that on the whole the necessary survey is assured.

THE BILL HOLDINGS OF THE REICHSBANK IN THE BILL CIR-CULATION OF GERMANY.

The position which a central bank of issue takes in the money market of its country is essentially dependent on the number of circulating bills which it concentrates in its portfolio. The greater this number the greater will be the control of the bank over the market and the more successful its discount policy. As the wealth of a land increases the influence of its central bank of issue will naturally decline; the more capital there is produced in the country and the more this capital collects in the most varied hands the less will the demand for capital seek satisfaction at the central bank.

In contradistinction to other banks of issue, the discounting of bills forms in the case of the Reichsbank the principal asset, not only occasionally, but constantly, and the strongest basis for its existence. In 1900 the average holdings in bills amounted to 42.3 per cent of its total assets. The interest-bearing liquid invested capital of the Reichsbank has always consisted for the most part of inland bills. Advanced loans and discounted effects are always greatly exceeded by bill investments. In the average of the last twenty-five years the ratio of the capital invested in bills to the total liquid invested capital, fluctuated between 79.5 per cent in 1881 and 88.3 per cent in 1876. In 1900 it amounted to 85.9 per cent.

Accordingly, the bills which the Reichsbank concentrates in its portfolio by means of discounting, are also a considerable part of all of the bills that are drawn in Germany. The organization of capital in Germany has made great progress within the last twenty-five years, and one might believe that, with the increasing wealth of the country and the growing competition of numerous private banks, the ratio of the bill portfolio of the Reichsbank to the total circulation had also

become smaller. That is not the case, however. The Reichsbank has managed to increase its share in the total bill circulation of Germany. Whereas in 1876 the Reichsbank purchased 33.3 per cent—that is, exactly one-third of all bills put in circulation during this yearthis share, after many fluctuations, rose by 1899 to 39 per cent, and declined in 1900 to 36.7 per cent. Thus in 1899 nearly two-fifths of all bills drawn in Germany were discounted at the Reichsbank. The the average bill investments to the total bill circulation is smaller, but still important enough to assure to the Bank a domination of the market. It has fluctuated between 11.3 per cent in 1881 and 15.8 per cent in 1893. In 1900 it amounted to 13.3 per centmore than an eighth of all bills in circulation. times of brisk demand for money within the various years—for instance, at the close of the quarters—this share increases considerably, while in times of easy money it becomes smaller. The fact that the ratio the average portfolio holdings to the total bill 1900, 13.3 per cent) is (in circulation SO less than the ratio of all bills discounted by the Bank to the total amount of the bills coming into circulation in Germany (36.7 per cent), is explained by the fact that the length of life of the bills circulating in Germany averages some ninety days, while bills purchased by the Reichsbank average for much shorter Their time to run, calculated from the day of purchase until the day when due, fluctuated in the last twenty-five years on a yearly average between thirtythree and forty-one days; it amounted on an average in 1900 to thirty-three days.

BILL PURCHASES OF THE REICHSBANK AS A SYMPTOM OF THE ECONOMIC SITUATION.

In general, the Reichsbank attracts in times of increased economic development, in which trade needs larger amounts of money, a higher percentage of the total bill circulation than in times of standstill or decline, which are noted as times of plentiful money. Thus the Prussian Bank had concentrated an average of 15.5 per cent of the total German bill circulation in its hands during the high state of economic activity and in the crisis of 1873. 1875 the share of the Bank in bill circulation had again declined to 11.1 per cent. There are many explanations for the fact that the Bank's share in German bill circulation has not diminished, but advanced, since the establishment of the Reichsbank, in spite of the growing wealth of Germany, in spite of the concentration of great capitals in the hands of numerous newly formed credit banks. On the one hand, owing to the rapid development of German economic activity, the demand for credit and means of payment has continuously risen; on the other hand, through the discontinuance of numerous private banks of issue and through the establishment of the transfer system, the Reichsbank obtained large funds with which, through the extension of its network of branches, it could satisfy the increased credit requirements by means of its discounts.

The Reichsbank's average investments in inland bills have, on the whole, increased considerably, corresponding

this general development. The fluctuations in the economic situation are clearly reflected in their changes. The claims on the Bank reached the lowest point in 1879 with an average investment of only 324,700,000 marks in inland bills, and with total purchases of 2,367,915 pieces to the amount of 3,369,400,000 marks. Since that year, which was a time of deepest economic decline for the German industrial world, the Bank has increased its bill transactions to more than double those amounts. In the last year, which forms the conclusion of its twenty-five years' development, more bills came to the Reichsbank than ever before. years the Reichsbank has been far ahead of all existing central banks of issue in average investments in bills, and, with the sole exception of the Bank of France, none of these banks bought so many bills last year for such a high total sum as the Reichsbank. With an average investment of 773,000,000 marks in inland bills, the Reichsbank in 1900 bought 4,416,417 bills for a total amount of 8,551,800,000 marks.

COMPOSITION OF BILL INVESTMENTS.

The Reichsbank divides inland bills purchased by it into local bills (*Platzwechsel*)—that is, such as are payable in the circuit of the purchasing branch—and consigned bills (*Versandtwechsel*), which are payable at any other "bank place."

LOCAL AND CONSIGNED BILLS.

Since 1876 the percentage of local bills in the total bill holdings has risen, that of consigned bills has correspondingly fallen. In 1876 consigned bills predomi-

nated with 56.7 per cent of all bills purchased on inland places; in 1900 the inverse ratio was observed. Local bills had risen to 56.3 per cent, while consigned bills represented only 43.7 per cent of all inland bills purchased. The average funds invested in consigned bills fluctuated within the past twenty-five years between 163,400,000 and 352,800,000 marks, that in local bills between 149,700,000 and 445,200,000 marks.

BILLS PURCHASED AT PRIVATE DISCOUNT.

The ratio of bills purchased at the private discount to all inland bills purchased by the Reichsbank was naturally subject to great fluctuations, if only for the reason that the number of days on which the Bank bought bills at the preferential rate has varied very greatly in the different years. During the whole of 1891, also from April 2 of 1896 to the present time, the Bank has discounted no bills at preferential rates. In 1890 such purchases were made on only seventy-six days. Such purchases were most constant in 1883, 1884, 1886 to 1888, 1892, and 1894, in which the number of days on which the Bank annually discounted bills at the private rate fluctuated between 323 (in 1888) and 350 (in 1884).

DENOMINATION.

The denomination of purchased bills allows interesting conclusions as to the extent to which those who claim credit for small amounts participate, directly or indirectly, in the bill business of the Reichsbank (cf. Table 51). From statistics which have been collected for all bills falling due from April 1 to June 30, 1900, and purchased by the Reichsbank, it has been found that far more than half

of all bills, namely, 55.5 per cent—in the case of local bills 43.2 per cent and of consigned bills over 60 per centwere for amounts of 500 marks and less; 72.3 per cent of all bills did not exceed 1,000 marks, and only 11.2 per cent were for more than 3,000 marks. By far the most bills under 1,000 marks, however, originate among the middle classes and small tradespeople, who make claims on the funds of the Bank in a particularly high degree, even though their direct claims are small. The increase of bills for less than 100 marks is especially noticeable, both absolutely and relative to the total number of all bills purchased—a sign that these very small bills multiply in a higher measure than large ones, and that the bill system and the credit given on bills by the Reichsbank are used more and more by small tradespeople. The growth since 1889, though not without interruption, is especially observable in the case of consigned bills; local bills show a small decrease in percentage.

AVERAGE AMOUNT.

The average amount of all purchased inland bills has been subject to considerable fluctuations; it was lowest in 1878 and 1879, a time of only weak demand for credit, and greatest in 1899 and 1900, when the excessively heavy credit requirements led to the drawing of numerous large bills. The same was true of 1890, a year in which the climax of a period of unusual economic activity was attained, when the average value of the various bills rose to a climax never reached before, namely, 1,727 marks. A particular reason for the advance in the average amount of bills in recent years is the fact that

the so-called Acceptkredit, the drafts on banks and bankers which are almost always for very high amounts, has come into vogue in an increasing degree. On the whole, the number of small bills purchased by the Reichsbank is considerably higher and the average amount of all bills considerably lower than is the case with private banks of issue, with the exception of the Bank of Saxony. This proves that, contrary to the prevalent opinion, the funds of the Reichsbank benefit the middle and small business man more than do private banks of issue.

AVERAGE TIME TO RUN.

The average time to run of inland discounted bills fluctuated between thirty-three and forty-one during the period. Apart from usages prevailing in various economic districts and from the credit requirements of the bill, the time is strongly influenced by the existing rate of discount. In times of a high interest rate the discounting customers of the Reichsbank offer for sale, as far as possible, only bills falling due in a short time, so that even in years of strong credit demand, as in 1899 and 1900, the average time to run amounted to only thirty-five and thirty-three days respectively, owing to the high rate of interest, as compared with forty-one days in times of abundant circulating capital, like 1894, when the average bank discount was only 3.117 per cent. Bills are more liquid the shorter the average time which all purchased bills have to run. Even in 1894, in this respect the most unfavorable year, in which the average time to run amounted to forty-one days, the bill holdings met fully all demands which must be insisted upon for the

assured redemption of notes, since 25.8 per cent of all the bills were due in the first fourteen days, 17.3 per cent in the next fourteen days—that is, 43.1 per cent of all the bills within the first four weeks. The most favorable ratio was in 1882, with an average time to run of thirty-three days; even here 51.7 per cent were due in the first four weeks. In 1900, with an average time to run of thirty-three days, it was 47.5 per cent.

PERSONS AUTHORIZED TO TAKE CREDIT ACCORDING TO THEIR VOCATION AND THE EXTENT OF THEIR CREDIT.

The average value, and the average time to run, of the various bills was considerably higher in local bills than in consigned bills. Both are naturally much greater in bills purchased below the bank rate, if only for the reason that the Reichsbank purchases at a private rate only bills amounting to at least 3,000 marks and with at least forty-two days to run.

The number of firms and persons directly or indirectly admitted to the discount business of the Reichsbank was in April 1896, 55,027, in December 1898, 58,988, and in August 1900, 62,763. Those are regarded as directly admitted who discount personally at the Reichsbank, and as indirectly admitted all other persons and firms liable on bills purchased whose solvency is unquestionable for the Reichsbank in the purchase of the bills.

National Monetary Commission

Credits to the extent of—	August, 1900.		December, 1898.		April, 1896.	
	Admitted to credit.	Per cent.	Admitted to credit.	Per cent.	Admitted to credit.	Per cent.
1,000-10,000 marks	24, 943	40	23, 288	40	21,742	40
11,000-20,000 marks	14,155	23	13,519	23	12,547	23
21,000-30,000 marks	6,795	II	6,641	rr	6, 237	11
31,000-60,000 marks	7,754	12	7,274	12	6,920	12
61,000-100,000 marks	3,872	6	3,528	6	3,214	6
101,000-500,000 marks	4,596	7	4,158	7	3,826	7
501,000 and more marks	648	r	580	1	541	I
Total	62,763	100	58, 988	100	55,027	100

AMOUNT OF CREDIT GRANTED.

The first group of small credits comprises by far the most firms and persons with 24,943, or 40 per cent of all credits; nearly three-fourths (74 per cent) of all persons authorized to take credit are below 30,000 marks. On the other hand, bill credit of more than 60,000 marks is given to only 9,116 firms, or 14 per cent of all firms admitted, a clear proof of the high extent to which the funds of the Reichsbank are at the disposal of middle and small businesses.

It is interesting to note the different industrial classes which enjoy bill credit at the Reichsbank.

The terms on which the Reichsbank grants credit by the purchase of bills are, to be sure, the same for all branches of industry, if the above-mentioned facilities granted to agriculture, craftsmen, and cooperative societies be disregarded. Bills originating within the different branches of industry are not, however, suited in an equal manner for the Reichsbank, for the needs for personal credit vary greatly with regard to the amount, length of time, and origin. Accordingly, the credit of the Reichsbank through discounts is not equally at the disposal of the various industrial classes, and is not claimed equally by them.

TRADE.

According to the statistics of August 1, 1900, most authorized credit takers (43.4 per cent) are among the mercantile class (including banks and bankers). the mercantile class takes most advantage of the bill credit of the Reichsbank, in comparison with other industrial classes, is explained by the fact that the bill business has spread most in this branch of industry, even in small businesses. That is also expressed by the fact that some 51.9 per cent of the tradespeople admitted to the bill business of the Reichsbank must content themselves with credits of not more than 10,000 marks. The participation of trading classes in the bill credits of the Reichsbank is naturally greatest in those town and districts in which business flourishes and surpasses in importance other branches of industry. That is particularly the case in western and southern Germany, also in the "free" cities. In Bremen, for instance, 74 per cent of all persons entitled to credit at the Reichsbank belong to the trading class.

It is of particular interest to determine what share banks and bankers take in the bill transactions of the Reichsbank; 3.8 per cent of all persons and firms admitted to bill business at the Reichsbank are among these. They make claims on the bill credit of the Reichsbank, in contrast to other trades, to industry, and to agriculture, principally in the higher stages of credit. Whereas only 28.8 per cent of all banking houses authorized to receive credit

get credits below 30,000 marks, 71.2 per cent of the banks authorized to receive credit enjoy bill credits which, for the most part, considerably exceed this amount. mating the position of banks and bankers in the credit business of the Reichsbank we must always remember that they are the greatest intermediaries for credit, and that the credit given to them by the Reichsbank benefits indirectly the other branches of industry. Many of the bills discounted at the Reichsbank by banking firms conform with the requirements of the Bank Act (sec. 13, p. 2) for discounts of the Reichsbank through the transfer system of the banking house in question, and the banks themselves discount these bills only on the possibility of rediscounting them at any time through their transfer account at the Reichsbank. As commerce and industry maintain banking connections more than agriculture, the ratio of banks to all firms and persons enjoying credit at the Reichsbank is considerably smaller in the agricultural provinces east of the Elbe than in the southern and western parts of the Empire.

INDUSTRY.

Industry and industrial companies represent 30.4 per cent of the total number of firms and persons authorized to take credit in the bill system of the Reichsbank. This average percentage rate for the whole Empire is considerably exceeded in industrial districts, particularly in the Rhine provinces, in Westphalia, and in the Kingdom of Saxony. Thus in Crefeld (velvet and silk industry) 61 per cent, in Aachen (cloth and chemical products) 53 per cent, in Dortmund (coal and iron) 49 per cent, in Chemnitz (spinning, weaving, and machine industry) 60

per cent, and in Plauen (textile industry) 66 per cent of all persons and firms admitted to the bill business at the branches of the Reichsbank belong to industrial circles.

AGRICULTURE.

Agriculture (inclusive of rural trades and factory industries) takes the least share (not quite 14 per cent) in the bill transactions of the Reichsbank. There is a natural reason for this, since this branch of industry takes little part in bill transactions in general. Where the agriculturist can make use of personal credit for obtaining and strengthening his working funds, he needs it mostly for long periods, so that only in exceptional cases is the Reichsbank of use to him as a source of credit, in spite of the facilities granted to landed proprietors. may appear strange that in agriculture the small and middle proprietors participate to a much higher degree in the bill business of the Reichsbank than is the case in trade and industry; 56 per cent of the agricultural credit takers enjoy credits up to 10,000 marks, against 52 per cent in the case of trade (inclusive of the banking), and 29 per cent in industry. This is to be explained by the fact that even to-day operations on a small and medium scale are much more common in German agriculture than in both the other productive classes. In proportion to other callings the Reichsbank serves agriculture most in the eastern and northern provinces. Thus, for example, in the circuit of the branch at Insterburg, 51 per cent of all persons authorized to take credit belong to the agricultural class, in Flensburg 50.5 per cent, in Tilsit 47.5

per cent, in Stolp 39 per cent, in Graudenz 38 per cent, in Thom 37 per cent, and in Posen 36 per cent.

Inquiries have been instituted to ascertain what claims have actually been made on the funds of the Reichsbank. especially with regard to agriculture, for two years. namely, from April 8 until April 7 of the years 1893-94 and 1897-98. Not in all cases in which the Reichsbank gives credit to farmers does this fact come to the knowledge of the farmer taking credit, as the latter arranges his debt on the bill with the first buyer of the bill. The bill, mostly domiciled at a "bank place," reaches the Reichsbank at second or third hand. grants of credit to agriculture are therefore in many cases As the bills made by farmers are seldom bills on merchandise (Warenwechsel), but mainly pure credit bills, they occur almost entirely in local bill transactions of the Reichsbank, particularly since the credit which the farmer enjoys is mostly limited to a certain territory, and his capacity for credit can be tested only at that place or in the vicinity.

Still, the bills purchased directly from farmers, agricultural industries, and manufactories amounted in 1897–98 to 68,500,000 marks against 23,800,000 marks four years previously—an important advance, especially if one considers that the amount of all bills purchased in the German Empire has in the same time increased by only 25 per cent. The sum of all bills purchased with the signatures of farmers, agricultural cooperative societies, and agricultural manufactories rose from 1893–94 to 1897–98 from 216,000,000 to 280,000,000 marks. The sum of all bills in connection with agriculture was 348,000,000 marks

in 1897–98 against 240,000,000 marks in 1893–94—that is, 5.1 per cent against 4.3 per cent of all bills discounted. Of these, nearly two-thirds belonged to the six eastern provinces of Prussia (excluding Berlin), namely, 203,900,000 marks, or 20.2 per cent, of all bills purchased there, against 157,900,000 marks, or 19 per cent, in 1893–94. At various branches the sum of agricultural bills—that is, such as bear the signatures of farmers—is more than half of all bills discounted, and at others it is nearly half. It amounted, for instance, in 1897–98 in the circuit of the Reichsbank in Flensburg to 58.5 per cent, in Zoeslin to 52.2 per cent, in Tilsit 49.3 per cent, and in Posen 41.4 per cent.

COOPERATIVE SOCIETIES.

Owing to the special interest which the Reichsbank has always taken in cooperative societies, because they represent the form in which bank credit can benefit the less wealthy classes, and in consideration of the facilities afforded them in accordance with the terms of the Bank Act, statistical inquiries into the credits given to cooperative societies have also been made; 1.2 per cent of all firms admitted to the bill business at the Reichsbank are cooperative societies of various kinds. According to the last report on German industrial and agricultural cooperative associations, there were in the Empire on March 31, 1900, 17,988 cooperative societies. Of these 773, or 4.3 per cent, enjoy bill credit at the Reichsbank. A much larger number of cooperative societies is admitted to the bill business of the Reichsbank, since the cooperative societies combined into unions (Verbände) work partially with the Reichsbank. The credits at the disposal of the

cooperative societies are comparatively high. Exactly half of the societies admitted enjoy credit within the limits of 21,000 and 100,000 marks. No other group, not even the banks with 41 per cent, participate to such a degree in these middle and higher credits. The sum of the credits actually claimed by cooperative societies in bill transactions amounted, from April 8, 1897, to April 7, 1898, to 203,000,000 marks, which is equal to 3.1 per cent of all bills purchased by the Reichsbank during this period.

PURCHASE OF BILLS IN THE VARIOUS ECONOMIC DIVISIONS
OF THE EMPIRE.

The results of the distribution of Reichsbank bill credits among different branches of industry are confirmed by the share taken by different economic regions and districts in bill transactions of the Reichsbank The industrially rich West is much more concerned in bill transactions of the Bank than the East. In 1900, for instance, of the total amount of all bills discounted at the Reichsbank, 13.6 per cent were in the Rhine Province, and only 9.8 per cent in the agricultural districts in the northeast of the Empire (East Prussia, West Prussia, Posen, Pomerania, Schleswig-Holstein, Brandenburg, excluding the circuit of the main bank in Berlin). The circuit of the main bank, Berlin, alone had 19 per cent, Silesia 6.2 per cent, the free cities 7.6 per cent, Saxony 7 per cent, Bavaria and Baden each 5 per cent. In the various bank circuits the economic conditions which prevail in different territories are not difficult to recognize. In 1900 about half of all bills

were purchased from the ten most important of the existing seventy-six independent branches; it was the same as early as 1876, in which half of all purchases were made in nine branch offices out of sixty. In 1900 the ten most important branches with regard to bill purchases were, in order of importance, Berlin, Frankforton-the-Main, Hamburg, Leipzig, Mannheim, Cologne, Breslau, Munich, Elberfeld, Dortmund. Since the establishment of the Reichsbank, noteworthy changes have occurred in the territorial distribution of bills. extension of the Reichsbank to the whole of non-Prussian Germany took place as early as the establishment of the Reichsbank, in fact, even earlier, in the time of the Prussian Bank. Especially in those provinces outside Prussia in which private banks of issue still existed and partly still exist, the Reichsbank could only gradually assure itself of an influence over the markets of the various provinces corresponding with its position as central bank of issue. This is seen if one compares the share taken by the branches in Prussia in the bill transactions of the Reichsbank with that of branches in other parts of Germany during their twenty-five years of development. Whereas in 1876, 78 per cent of all bills discounted by the Reichsbank belonged to Prussia (inclusive of the Thuringian states, Oldenburg, and Brunswick), this share diminished by 1880 to 68.2 per cent, by 1885 to 66.6 per cent, and by 1890 to 64.5 per cent, while conversely the share of branch offices in other parts of Germany increased. In the last decade there has occurred a trivial movement in the opposite direction in favor of Prussian domains, so that the share of Prussia rose again by

1900 to more than two-thirds of the total purchases. The movement of bills discounted at branches during the last twenty-five years corresponds with the development of economic intercourse. Consideration must be taken of the fact that in many cases the establishment of new suboffices and the division of larger independent bank circuits has brought the Reichsbank more requests in many provinces. This has been of importance for the bill holdings of numerous branches. Many local changes in the use of bank credit have arisen in this way.

Fluctuations of profits in discounts have not been parallel with the amounts of bills purchased in various economic districts. Where the economic activity requires credits for long periods, where accordingly the average life of purchased bills is long, the ratio of the profits of these districts to the total profits will be larger than the ratio of bills purchased in those districts to the total amount of bills purchased. Therefore the eastern provinces of Germany, in which agriculture produces bills with a relatively long time to run, participate to a greater extent in the total profits than in the total amount of discounted bills.

PROFITS AND LOSSES IN DISCOUNTS.

The profits of discount transactions of the Reichsbank since its foundation gives on the whole a representative picture of the economic development of Germany. Declining continuously in the first four years the discount profits rose from 1880 to 1882 nearly to the height in 1876, sank by 1886 almost uninterruptedly with decreasing dis-

count rates to its lowest level of 10,500,000 marks. The rapid economic development, which found its zenith in 1890, brought almost uninterrupted advances up to the previously unattained height of 23,000,000 marks. The succeeding depression also finds expression in the decline, interrupted only once, of discount profits until 1895. The following unexampled advance made itself felt in an extraordinary rise of interest proceeds, which increased far more rapidly than the accompanying rise of interest rates. This is attributable, first of all, to the important increase of purchases and only in a moderate degree to the higher discount. It may be mentioned that in 1880, with an average discount of 4.24 per cent, discount profits amounted to only 13,400,000 marks, and in 1898, with approximately equal interest rates (4.267 per cent), to 28,800,000 marks. Whereas in 1890, with an average rate of 4.5 per cent, 23,000,000 marks were obtained, the somewhat higher proceeds of 23,700,000 marks in 1897 were obtained at an average rate of 3.8 per cent.

The number and sum of bills not paid at all or not paid at the proper time by the drawees—in which the other liable parties must first be held responsible—fluctuate according to business usages, economic conditions of the various districts, times, and callings. In 1900, 4.37 per cent according to number, and 1.08 per cent according to amount, of all bills purchased were not paid or not paid at the proper time—a sign that the smaller bills are concerned more than the larger. This fact is particularly striking in the case of bills under 100 marks, of which 8.65 per cent of the total remained unpaid. The

reason for this lies in the fact that great merchants are prompter in their payments and guard more zealously their reputation of full solvency than smaller tradespeople; furthermore, the drawees of large bills are much shyer of protest than those of small ones. Also the Bank admits no large bills without acceptance, but admits small ones when they have not much time to run. An unaccepted bill, however, is allowed by the drawee to go back for nonpayment sooner than an accepted one. For a similar reason, the ratio of bills remaining unpaid to the total sum of all bills presented for payment was more favorable in the case of local bills than in that of consigned bills; the former must, without exception, be supplied with acceptance at the time of discounting, while the latter need not be. Of local bills, 2.71 per cent according to number, and 0.69 per cent according to amount, were either not paid at all or not paid in time, as against 5.06 and 1.32, respectively, in the case of consigned bills.

The sum of so-called *Stockwechsel*—that is, those bills which, on maturity, could not be paid even by other parties liable on them, and which were therefore held on the books—amounted during the twenty-five years of the Reichsbank's existence to only 11,800,000 marks, or 96.10 marks on each 1,000,000 marks of bills purchased, and most of these have subsequently been paid.

The losses of the Reichsbank in bill discounts have consequently been quite insignificant. The total loss in the annual average of the twenty-five years of the Reichsbank's existence has been 152,803 marks—that is, only 0.81 per cent of the average profit, amounting to

18,802,671 marks. On each 1,000,000 marks of bills purchased, the Reichsbank has suffered a loss of 31.2 marks. In connection with this, we must remember that the Reichsbank in the twenty-five years of its existence has been free from great political and serious economic crises.

THE PURCHASE AND SALE OF FOREIGN BILLS.

The buying and selling of foreign bills is allowed to the Reichsbank by the Bank Act under the same conditions as those of inland bills (sec. 13, no. 2). In the nature of things, however, the Bank must employ in this branch of business more severe, and, in part, different principles. Great precaution is more necessary because information about foreign parties liable on bills is imperfect and hard to obtain, the fluctuations of foreign rates of exchange are violent, and the laws and usages in individual countries vary greatly. On the other hand, however, it is desirable that the Reichsbank hold a certain stock of foreign bills. Such a stock is, in times of significant scarcity of money abroad, a preventive against the rise of the rate of exchange and against the outflow of gold, and in times of economic and political crises at home a means of drawing gold from abroad. Through its foreign bills of exchange (Devisen) the Reichsbank is not only able to give up bills from its portfolio for making payments abroad, and so to relieve the price-raising sudden call on the market, but if need be to oppose successfully through increased offers on the Bourses an advance of the rates of exchange beyond a certain point. The strength of this influence is directly dependent on the ratio between

foreign-bill holdings of the Bank and the current demand. Although, as a rule, such an influence can be only temporary, yet the Reichsbank has in this way repeatedly succeeded in preventing threatened exportations of gold, or at least in postponing them for a certain time and in limiting them in duration and extent.

On the other hand, the Reichsbank must hesitate to increase its holdings of foreign bills beyond a certain measure. Apart from the above-mentioned test of the credit capacity of foreign firms—a test which is not always easy or reliable—the Reichsbank needs legally limited funds for satisfying legitimate domestic claims. The stock of foreign bills is, moreover, limited and dependent upon commercial transactions within the agreements between the countries in question. Reichsbank entered the market as competitor in the purchase of too many bills, it would necessarily advance the rate of exchange and cause an outflow of gold from the country—the very opposite of what it wanted to The purchase of bankers' drafts, which rest upon pure credit, would be useless, as the drawer himself must, as a rule, first provide cover for his draft, and this takes back to the foreign country the amount of gold collectible on maturity of the bill.

The Reichsbank can purchase bills only on such foreign states whose standard appears sufficiently assured. It must keep out of its portfolio bills which are subject to heavy fluctuating rates of exchange. The number of countries on which it buys bills has considerably increased since its establishment. It has been guided mainly by the requirements of trade, so far as these directly concerned it and appeared large enough to form a special business connection abroad. At the present time it purchases bills on the more important places of England, France, Holland, Belgium, Switzerland, Denmark, Scandinavia, and Italy. The terms naturally vary; the principal determining factors are the place of payment of the billswhether at a first or a second class city—and, furthermore, the amount and time to run. In the computation of the rate, however, only the rate quotation on the Berlin Bourse is used as basis. On England, checks as well as bills are bought, as there they possess the character of bills. The purchase of bills on foreign places has in the course of time been continuously extended and facilitated. The purchase fee has been materially reduced; it amounts to-day to ½ or I on a thousand, depending upon whether the long or the short rate is to be used for the bills, but at least 50 pfennigs for each bill. The Reichsbank sends foreign bills coming into its portfolio, so far as they are not sold again at home, to its correspondents abroad, who collect them for the Bank's account.

The sale of foreign bills is closely related to their purchase. The Reichsbank always gives up bills on foreign places so far as they are on hand in suitable amounts. If suitable bills are not on hand or not disposable, it procures them for a commission at the Bourse, and in some cases it fills the orders by its own checks drawn on its foreign correspondents. The fee amounts to 1 on a thousand; it is not charged in those cases in which the purchaser raises the money through bill discounts or collateral loan transactions yielding at least ten days' interest.

The purchase of foreign bills has on the whole moved in pretty narrow limits; in 1876 it was only 17,600,000 marks, in 1900, 211,800,000 marks.

Among the countries on which the Reichsbank purchases foreign bills those naturally are foremost which participate most in the export trade of Germany. Most purchased foreign bills have always been on England, not only on account of the active commercial relations with this country, but mainly because through England are made most international payments. The percentage of bills on England in the total of all bills purchased on foreign places has never sunk below 75.2 per cent (1877); it was greatest in 1900, when it rose, in consequence of heavy purchases of English foreign bills on the Bourse, to 95.1 per cent. It was also very high in 1886 and 1899—91.6 and 88.7 per cent, respectively.

Aside from Berlin, those branches are most important which are in circuits where export industries flourish, for instance, the Rhine circuits, Chemnitz, and Münster. Changes in the commercial policy of foreign states which materially influence exports to those countries are felt also in foreign bills transactions. Thus the silk and velvet industry of the Crefeld circuit formerly exported heavily to North America; considerable amounts of bills resulted, particularly on England, which were discounted at the Reichsbank branch in Crefeld, so that this branch took almost first place among branches participating in foreign bill transactions. The recent North American protectionist policy completely crippled this export of silk goods; whereas in 1888 foreign

bills were purchased in Crefeld for over 6,500,000 marks, this sum decreased almost uninterruptedly to 1,600,000 marks by 1900.

DISCOUNTING OF SECURITIES.

Closely related to bill discounts, although not comparable to it in economic importance, is the discounting of securities which fall due after a certain period. The Reichsbank is permitted by the Bank Act to purchase bonds of the Empire, of a German state, or of an inland communal corporation, which are due at face value within three months at the most (sec. 13, no. 2). Among securities purchased by the Reichsbank are mainly exchequer bills of the Empire and of the federal states, also receipts for rebate of taxes (Steuer-Rückvergütungsanerkenntnisse) on exported spirits and sugar, and, since August 1, 1892, export bounty certificates (Ausfuhrzuschuss-scheine) on domestic sugar. In general, principles hold good in this branch of business similar to those in the purchase of bills, and the same rate of discount is employed. Since 1882 the Reichsbank has little by little begun purchasing securities at a private discount under conditions corresponding with those customary in the purchase of bills below the official rate of discount.

This branch of business has always, in comparison with other assets, been of relatively subordinate importance; the average capital invested in discounted securities has not been large either absolutely or in relation to total investments, except in the period from 1879 to 1887, in which it fluctuated between 13,500,000 marks and 40,900,000 marks, and in relation to the total

interest-bringing invested capital between 3.2 per cent and 8.8 per cent. Since that time it has remained between 1 and 2 per cent.

COLLECTION OF BILLS, ETC., RECEIVED ON COMMISSION.

In contrast to the purchase of bills and securities for the Bank's own account, the collection of bills on commission (Auftragspapiere) is a branch of business free from all risk. The whole responsibility of the Reichsbank consists in fulfilling as commission agent the obligations to which it assents on accepting the paper for collection. In general no principles of importance to policies of banking arise; the Reichsbank, supported by its many branches, performs for trade an important but mechanical service. All documents are acceptable for collection which are payable on presentation, or at the latest within fourteen days after delivery at a bank place, that is, bills, drafts, and securities of all kinds, interest coupons, dividend warrants, etc. In the adjustment of terms in this branch of business, the Reichsbank aims to attract to itself those papers which do not come to it in any way as material for discount, either because they are excluded from discount on general legal grounds, as, for instance, drafts, checks, receipts, and the like, or because they are not suitable for purchase on account of some special deficiency. At the same time, the Bank must avoid creating a competition with its own discount business by favoring collection business, especially in bills, as one of its chief tasks as central bank of issue is the encouragement of this line of business (discount); besides, in addition to cash (Barvorrat), only discounted bills are cover for notes.

The terms on which the Reichsbank collects have been materially modified in the course of time. The Bank has adapted itself to the increased demands of trade with respect to fees and the speed of the process. The fee, because of the absence of all risk, is very small; it amounts in general to 1 on a thousand, but at least 50 pfennigs for each document; in the case of interest coupons one-fourth of I per cent, at least 50 pfennigs for each kind; in the case of securities, expressage must also be paid. For bills which remain unpaid, a fixed fee of 1 mark or 50 pfennigs, respectively, must be paid, depending upon whether they go back with or without Bills domiciled at the Reichsbank, checks on another branch (since 1879) or a banking house which is a member of a clearing house (since 1884), are subject to a fee of only one-fifth per thousand, but at least 30 pfennigs for each. In this extremely moderate charge is expressed not only the small expenditure of trouble in presentation and collection, but also the intention of the Reichsbank to promote so far as practicable the payments at its own office and at clearing houses.

The branch at the place of payment collects with all possible dispatch the papers coming to it and likewise informs the presenting branch of the effected payment, so that the equivalent can be immediately received Suboffices have not the authority to give direct notification, which, on the contrary, is effected through its superior branch; only since December 18, 1899, is this permitted and prescribed for suboffices with several officers.

In the first years of the Reichsbank's existence its collections did not increase, but decreased appreciably.

Since 1885, after the establishment of clearing houses and the development of check traffic, they have rapidly and steadily increased. The annual total sum of collections on commission has risen since then from 6,000,000 to 125,000,000 marks. In the increase of the average amount of papers handed in is shown likewise the increase since 1885 of checks for large amounts. The decrease in the average amount of papers handed in since 1890 for collection does not show a decrease of checks, but indicates that they have penetrated into the national economic system. They have come into vogue more and more for smaller payments. Of checks, about one-half were on members of clearing houses in 1900; nearly a quarter were checks on the Reichsbank, so that nearly threefourths were collected at the reduced rate of one-fifth on a thousand. The minimum charge of 30 pfennigs was employed for about 20 per cent of all checks handed in, and that of 50 pfennigs in the case of only 4 per cent.

Bills and notes handed in by customers having current accounts and payable at the place itself (Giroeinzugs-wechsel), are classed with bills and other securities collected for the accounts of others. Such paper must be handed in at the latest on the forenoon of the working day immediately preceding the day of maturity. The collection is free of cost; only on bills remaining unpaid is there a fixed fee of 20 pfennigs for each one.

The Reichsbank also takes papers on foreign countries for collection. This branch of business, however, has not yet attained proportions worthy of mention.

CHAPTER VI.

LOMBARD LOANS.

(Loans on collateral.)

IMPORTANCE OF LOMBARD LOANS.

Lombard loans—that is, advances on deposited securities—are for modern banks of issue of far less importance than bill purchases, not because they are of smaller economic value, but because lombard advances can not be used as cover for notes. So far as rapid and certain realization is concerned, loans on collateral can not be compared with bills carefully chosen in accordance with banking principles; a lombard advance does not always rest unconditionally on a business basis, as does a business bill, especially the solid merchandise bill (Warenwechsel). A lombard loan, on the contrary, often aims to supply temporary working capital, whereas the equivalent of a bill must be on hand in the regular course of production and sale from the origin until payment, whether the equivalent be goods or, in case these are sold, proceeds. A certain class of bills also serves in providing needed capital. The nature of these, however, is not hidden from the experienced banker. This clearness the lombard loan does not possess. Characteristics from which the kind of credit claimed in the lombard loan can be inferred are, as a rule, wanting. The degree of probability with which the repayment of the loan can be reckoned upon depends on the manner in which the capital is employed. These deficiencies in individual lombard

loans, and therefore in all lombard investments, can not be obviated through the safety of the pledge, even by observing the most careful limits in making advances. This safety and the realization of outstanding claims really depend on whether the market is in a position to take up securities in case of a compulsory sale. Experience has shown that this can not be reckoned upon with certainty; lombard investments have often turned out to be tied-up capital in critical times, when central banks of issue, out of regard for the prompt redemption of their notes and the repayment of deposits, were obliged to take steps for the realization of their claims.

For these reasons the Bank Act stipulates that, besides cash, only bill investments, and not lombard holdings, are to be regarded as cover for notes; further, that the central committee must be consulted as to the highest amount to which the funds of the Bank should be employed in making advances (sec. 32, par. 2). The weekly statements of lombard holdings are to be laid before the central committee for inspection (sec. 32, par. 1). Contango business (Reportgeschäft), which is economically and technically related to lombard loans, is forbidden to all banks of issue (sec. 7, par. 2).

On the other hand, the Bank Act makes it easier for the Reichsbank to satisfy the need for lombard credit by allowing it to realize pledges through the sale of deposited security at public auction, in case the debtor is in arrears, without legal authorization or cooperation, or to have it sold at the Bourse price, and to reimburse itself out of the proceeds for capital, interest, and costs. The Bank re-

tains this right also against other creditors, and against the bankrupt estate of the debtor (sec. 20).

REGULATION OF LOMBARD INVESTMENTS THROUGH THE INTEREST RATE.

The necessity of keeping lombard claims within the bounds dictated by prudence has led the Reichsbank and most other banks of issue to charge for these loans a rate of interest exceeding the bill discount. Only in rare cases of advances on precious metals, which must be judged from other points of view, is the interest rate the same as the bill discount. The difference between bill and lombard rate of interest has, as a rule, amounted in the case of the Reichsbank to I per cent. Only temporarily was it possible for the Bank to keep the lombard rate of interest at the same height as the discount rate, or at a rate exceeding the latter by only one-half of I per cent. Even the order of March, 1884, which tried to make easy the disposal of German imperial and state bonds, and stipulated that the interest of loans on exclusive deposits of this one group of papers was to be calculated at a reduced rate, could not be followed for any length of time. It was rescinded on July 1, 1897.

As in the purchase of bills, so in lombard transactions, the adjustment of the interest rate has been the most important means of which the Bank has availed itself in the regulation of its investments. With this procedure the Bank could grant at any time any required loan for adequate security. It was never compelled to put into force more or less arbitrary restrictions on the takers of loans, as did the Prussian Bank, which was hindered

until 1864 and 1866 through the Bank Statute and the usury laws in its freedom of fixing its lombard interest rate. The current rate at which the Reichsbank grants loans must be published (sec. 15). Changes take place, almost without exception, simultaneously with those of the discount rate. The new rate of interest is valid for all loans from the day it is fixed.

ORGANIZATION OF THE LOMBARD SYSTEM.

The principles, hereafter to be described, on which the Reichsbank grants lombard credit, and the forms in which this business is executed, are essentially determined by the necessity of choosing suitable security and of ascertaining its value, by the maintenance of an effective title to the pledge, and by the highest possible liquidity of the lombard investments.

THE DEBTOR.

The circumstances of the debtor are not entirely disregarded, as the loans granted to him must not be disproportionate to his means. The Bank also requires that the taker of the loan has a good, spotless reputation, and that all doubts are cleared up regarding his ownership of the pledge. In order that the credit of the Bank may not be misused for economically injurious purposes, loans are made only to persons who are not likely to contemplate speculating. Yet the borrower is so much in the background that the whole regulation of the business is governed mainly by the security which the loan is to find in the pledge. As formerly at the Prussian Bank, loans are not granted to foreigners. STOCKS AND SHARES, BILLS, AND PRECIOUS METALS AS DE-POSITED SECURITY.

The Bank Act, in section 13, paragraph 3, permits advances on gold, silver, securities, bills, and merchandise stored in the country, in connection with which the several groups of effects suitable as securities for advances are exactly described. These are interest-bearing bonds of the Empire, pavable to bearer, also those of German and foreign states, German communal corporations, other domestic bonds, in case their interest is guaranteed by the state, certificates of agricultural, communal, and other land banks of Germany under state supervision, and of German joint stock mortgage banks (cf. p. 353). German state and communal bonds not bearing interest, such as imperial exchequer bills and receipts for rebate on taxes (Steuervergütungsanerkenntnisse), are also admissible as securities if they become due, at the latest, within a Furthermore, loans can be given on interest-bearing priority obligations of inland railways, and those of foreign railways which are guaranteed by the state, and, finally, fully paid-up common and preferred shares of German railway companies whose railways are in actual operation. All other shares are excluded from lombard transactions.

TEST OF THE PLEDGE WITH REGARD TO ITS SAFETY.

The Reichsbank Directorate proceeds to make a further choice from these legally admissible papers. It makes its decisions as a rule on the application of the issuing body or institution, especially of those which are particularly interested in the suitability of the paper as security; it investigates carefully the legal circumstances of

the material security—of the so-called funding (Fundirung)—and especially of its marketability. matters the advice of experts, who are at the service of the Reichsbank Directorate in the central committee (Zentralausschuss), is ordinarily taken, although there are no legal obligations to do so. Foreign securities, which are in themselves solid, but are not introduced on German bourses, and the salableness of which is therefore limited, are excluded from loan transactions. Securities which fulfill the conditions are put on the list of securities upon which the Reichsbank may make lombard loans (Verzeichniss der im Lombardverkehr der Reichsbank beleihharen. Effekten.) Certain home securities, such as the bonds of many towns and districts, which satisfy the requirements but have only a local market, are often admitted to loans only with the provision that advances on them may not be made at all branches, but only at those in the circuit of the place of issue or in a district near this circuit; the special consent of the Reichsbank Directorate is necessary for making advances on such securities at the other branches.

With respect to advances on bills, the Reichsbank holds fast to the principle that bills which are not discountable are not to be taken as security for loans.

DEPOSITING OF THE PLEDGE.

In advances on securities, bills, and precious metals, the depositing of the pledge offers no difficulties. Valuables of this kind can be taken directly into the vaults of the Bank. Great values are kept here in small bulk. The cost and trouble of transportation of such securities are so

insignificant in proportion to the value of the pledge that even persons who do not have their residence in the city of the branch can bring such valuables, with profit, to the nearest bank place for the purpose of obtaining loans.

MERCHANDISE AS PLEDGES.

TECHNICAL DIFFICULTIES

Advances on merchandise (Kaufmannswaren) take another form. Obstacles have constantly stood in the way of this branch of business on account of the nature of the goods and the laws. Here it is a question not only of ascertaining the kinds of merchandise suitable as security for loans-which the Reichsbank Directorate undertakes-but also of judging in each particular case whether the goods are in a condition to warrant a loan being made, even if the category to which they belong is in itself admitted to lombard loans. In this connection attention must be paid to the depository, whether it is suited for a lengthy storage of merchandise without injury, whether it offers sufficient protection against damage, robberies, and the like, and especially whether the storeroom admits of the separation of the pledge from goods not pledged, which is so important for the validity of the title to the pledge. Furthermore, attention must be paid to the means of preservation, for example, the cask, in the case of liquids. The estimate of the value of the pledge is also difficult; the determination of the quantity of goods is often attended with many formalities, and of the quality still more so. The Bank is dependent on the more or less reliable judgment of experts—the regular valuers (Taxatoren). Owing to dangers in advancing loans on goods,

the Reichsbank Directorate has in each case reserved the decision with respect to certain merchandise which it does not exclude from lombard loans on principle, but which may, under certain circumstances, be objectionable because the safety or economic usefulness of the loan is not established.

As the Reichsbank does not possess rooms of its own for the reception of goods, the whole transaction is ordinarily completed on the premises of the pledger, in public storerooms, in warehouses, etc., in which the merchandise already lies—often in bond. The Bank is mainly dependent on the assistance of another official, the pledge supervisor (*Pfandaufseher*), who takes the pledged objects into custody and watches over them for the Bank.

The functions of valuer and supervisor are often combined in one person. Only reliable experts—whenever possible those who are already recognized and sworn by public authorities and courts of law—are permanently engaged for this work. When the pledged objects are lying in bond, the Board of Inland-revenue acts as supervisor, and is recompensed for its services according to a fixed tariff.

In accordance with the "instructions for valuers and supervisors of pledges at the agencies of the Prussian Bank" of August 23, 1851, which is in force to-day for the branches of the Reichsbank, the determination of the quantity and quality, as well as the assessment of the value of the pledge, is made upon a written order of the Bank which supplies the valuer with a list of goods to be taken in pledge. On the valuation which he fixes is based the amount of the loan.

The advantages of collateral loans on merchandise (Warenlombard) of the Reichsbank are mainly accessible only to those whose goods are stored at the seat of a branch establishment of the Bank, or at least in such proximity to one that the supervision of the pledge is possible from the office making the advance. In the comparatively thinly populated eastern and northeastern agricultural provinces of Prussia, in which the need of advances on merchandise was great even in the days of the Prussian Bank, and still is to-day—provinces, however, which can be but poorly supplied with branches—the advantages of merchandise loans would therefore benefit only a limited circle of customers if a way had not been created by the establishment of so-called warehouses (Warendepots). They are established exclusively for the purpose of making advances on goods at such places in which a branch of the Reichsbank would not find sufficient profitable activity. The managers (Vorsteher) of the warehouses, as a rule, serve the Bank as an incidental employment. They are engaged under the same conditions as other valuers and supervisors of the Reichsbank. Warehouses are placed under independent branches and act only on special instruct tions from them. Frequently they act as intermediary in the purchase of bills, but keep no separate cash accounts. Warehouses are established by the Reichsbank Directorate, according to requirements, on the application of parties interested. The first warehouse was established in Ragnit by the Prussian Bank in 1847.

At the beginning of the fifties, when the Prussian Bank was charged with rendering the assistance which until that time was effected by state loan offices (Darlehnskassen),

established by the act of April 15, 1848, but dissolved again by the act of April 30, 1851, warehouses were established in quick succession and in great numbers, especially in East and West Prussia, Pomerania, and Posen. For this purpose the bank offices (*Bankkontore*) chiefly affected by this movement were made independent.

Not a few warehouses have in the meantime been discontinued, while others have developed into suboffices or independent branches (cf. Table 5).

LEGAL DIFFICULTIES.

Legal decisions and legislation have repeatedly exercised an influence on the form of depositing the pledge. The mere symbolical, not actual, delivery of the security allowed by the Reichsbank under certain conditions and with observance of the necessary precautions previous to the enforcement of the "Imperial Bankruptcy Act for the domains under the general Prussian common law" (Reichskonkursordnung im Geltungsbereich des Allgemeinen Preussischen Landrechts) has since that time no longer been permitted by the Bank. The pledging of goods must now be completed at those places where the delivery of the pledge at the Bank's own premises is impracticable, in forms which actually transfer possession to the Bank, maintain it for the period of the loan, and are suitable for assuring to the Bank a valid and effective lien. The duration of possession obtained through the acceptance of goods is made known on the exterior through a label with the inscription "Reichsbank," as well as by a special seal. Frequently other measures, adapted to local circumstances, are necessary in order to prevent confusion, obscuration of the facts of the case,

and exchanges and thefts of merchandise. An inquiry is made into the events leading up to the pledging of the securities. It is hardly necessary to mention that the pledged goods must also be insured against fire, and that the claims arising out of damage by fire must be ceded to the Bank by delivery of the policy.

SPECIAL FACILITIES IN ADVANCES ON CEREALS, SUGAR, AND SPIRITS.

Although a warrant law does not exist in the German Empire, the Reichsbank has, nevertheless, made it possible, in the course of years, to introduce facilities in the business of making loans on merchandise. These facilities chiefly benefit agriculture. Thus, since 1887, the Bank makes advances on domestic spirits lying in private storerooms in bond without requiring a specification, assessment, delivery, and supervision of the pledge. In like manner advances have been made in Prussia since 1895 on sugar, also lying in bond in private storerooms. The quality of the sugar must be determined by a sworn sampler, and an attestation of the "rendement" or refining value must also be brought from a sworn chemist. The attestation of the quantity of pledged goods is given by the revenue board, which also takes possession of the pledge for the Reichsbank.

Since 1896 the Bank makes advances on grain which is still stored on estates, when suitable storehouses are at hand and a person can be found to act as supervisor. A serious legal obstacle stands in the way of the increase of loans on grain, since grain already reaped but still on the property is security for the mortgagees of the land (*Realgläubiger*). The claim of the mortgagee must be satisfied before a loan can be made. For this

reason a renunciation by the mortgagee must be registered in the land register. At the same time a guarantee mortgage must be registered to the extent of the loan, for the purpose of getting a first claim against any mortgagee subsequently registered.

LIMITS SET FOR ADVANCES.

The highest amount to which advances may be made on security is defined in the Bank Act (sec. 13, fig. 3). In accordance with this, the highest loan to be made on German securities, the Class I in the "list of effects on which the Reichsbank can make advances," is threefourths of their market value, and on foreign securities. the Class II of this list, half of their market value. The limit is somewhat lower in the case of the latter, not only on account of the lower degree of safety and the greater market fluctuations, but also on account of the fiscal and economic policy of the Empire, because advances on foreign securities are to a certain degree indirect grants of credit to the foreign country. Loans on merchandise may not exceed two-thirds of its value, but in the case of precious metals, coined or uncoined, may be to the full value.

LEGAL AND ACTUAL LIMITS.

The well-established "legal" limits for advances are, however, not always identical with the limits within which the Reichsbank regards a loan as safe. The latter, corresponding to changing economic conditions, have repeatedly been narrowed and extended. Thus the Reichsbank up to 1880, like the Prussian Bank before it, distinguished two subdivisions in the advances on German

securities, and lent money on the first subdivision at three-fourths of the market value, but on the second at only five-eighths; at the same time it had a second limit dependent on the nominal value, since the loan might not exceed 80 per cent of the face value. The first subdivision comprised loans issued by the Empire or one of the German federal states, the certificates of Prussian land banks and of other land credit institutions (Realkreditinstitute) resting on similar basis; the second subdivision consisted of shares and priority obligations of German railways, bonds of German towns and districts, and other securities similar to these—that is, of papers which at that time were either distinguished by strong fluctuations in price or had a limited market. The impulse toward equalizing the two divisions was given when the most important Prussian railway systems were taken by the state, in consequence of which the shares and obligations which had previously represented the most substantial part of the second subdivision entered the first. The Reichsbank followed more closely the provisions of the Bank Act and did away with the severe measures which had gradually become a check on the prosperous development of lombard loans.

In lombard bills only the legally prescribed minimum deduction of 5 per cent need be mentioned (Bank Act, sec. 13, par. 3d).

In the case of precious metals the same deduction as in the case of bills is made—that is, 5 per cent as a rule. In the case of silver a deduction up to 15 per cent has actually been made on account of the fall in price, which took place throughout a number of years, although the act, as

already mentioned, permits advances on both metals to their full intrinsic value.

It is impossible to settle once for all the limits to which loans can be made on goods. The strong fluctuations in the value of the pledge must be reckoned with, especially in cases where it is impossible to dispose of the deposited security. Accordingly, the regulations with respect to the different kinds of goods have been repeatedly altered.

DEPRECIATION IN THE VALUE OF THE PLEDGE.

The limits for advances are not only to be observed in the actual grant, but also during the whole duration of the loan—that is, an excess of these limits may not be brought about through depreciation in the value of the pledge. Consequently, in case the market value of the pledged papers or the appraised or market value of the deposited goods declines or if changes in the condition or amount occur during storage, the original safety must be restored either by a proportionate payment or by additional security.^a

THE LOMBARD CONTRACT. VERIFICATION.

The authentication of lombard transactions consists of a receipt certificate (*Pfandschein*), made out by the Bank to the debtor, in which it acknowledges the receipt of the deposited security.^b The latter must always be given to the Bank through a special inventory, the

a Within three days after the demand which the Bank issues as soon as the depreciation in value reaches 5 per cent of the market value or one-sixth of the assessed value.

b As at the Prussian Bank since 1844.

so-called Spezifikation to be signed by the borrower. The certificate states the conditions under which the loan has been granted. The debtor acknowledges receipt of the loan by signing a duplicate of the certificate, which remains at the Bank. In case the certificate is lost, this duplicate, with entries subsequently added by the Reichsbank, is conclusive and binding for both sides. There is no further exchange of signatures beyond that effected by the borrower who receives the original, signed by the Bank, for his receipt (on the duplicate). Further loans, which, like the first, are granted against the signature of the debtor, are added to the loan debt on the certificate in original and duplicate, and installments paid off are entered to the credit of the debtor in the same way, without any further receipt from the Bank. Alterations in the deposited security, i. e., withdrawals against the debtor's receipt or the deposit of further security in accordance with the abovementioned specification are authenticated in the certificate in the same way. In this manner all authentications are completed in the form of a current account and are extremely convenient for business people. On the release of the pledge the receipted certificate must If the certificate has been lost, it must be returned. be legally declared null and void before the security is returned.

TERMS ON WHICH AN ADVANCE IS MADE.

Lombard loans may be granted for any time up to three months, in accordance with section 133 of the Bank Act. Nevertheless, in the interest of the greatest possible liquidity of its holdings, the Bank has reserved the right to call in loans daily; on the other hand, it allows borrowers to discharge the loan any day, wholly or in part.^a

Whereas the Reichsbank has never availed itself of its right to recall daily its lombard loans, the repayments and new advances are made in accordance with the needs and wealth of the borrowers. To be sure, their free will is not unrestricted, for the Bank, in the interest of simple business routine and for the avoidance of unnecessarily small payments, sees to it that installments are paid as a rule only in amounts of at least 10 per cent of the sum owed, and not below 500 marks. In making advances on securities, the Bank also insists that in case of a diminution of the loan debt, if the taking and repayment of loans on one certificate do not follow in quick succession, the

a The Prussian Bank, in earlier years and under other circumstances, had granted lombard loans for a fixed time. At the beginning of 1880 such fixed loans, with a settled time for repayment, were experimentally made by the Reichsbank at reduced rates of interest and for a period of six weeks or three months. In the first case the reduction amounted to one-half of I per cent, and in the latter I per cent. Fixed categories of German securities, bonds of the Empire and the federal states, also shares and priority bonds of German railways taken over by the Empire, were admitted as pledge. An exchange of pledged securities was permitted only in exceptional cases and not more than once during the transaction, and the addition of new loans on the certificate not at all. Notwithstanding these restrictive regulations, it was necessary to withdraw this privilege after a quarter of a year. The end aimed at by the Bank in these measures an increase in this line of business in times of business depression, by basing loans on liberal pledges of most reliable German investment securities—was not attained. The system was used, comparatively speaking, to only a small extent. So far as this did happen, the fixed loans at the reduced rate of interest took the place of loans which had previously borne interest at the ordinary percentage. The lombard system, viewed as a whole, had not altered either in extent or composition; lombard investments based thereon, however, were now divided into two parts-one which could be called in at any time and one due at fixed periods. The change had been brought about exclusively at the cost of liquidity with a decrease of lombard profits.

corresponding part of the pledge thus becoming free is to be taken back. By this means the misuse of the lombard arrangements of the Reichsbank for other purposes, e. g., for the gratuitous custody of securities, is avoided.

The calculation of lombard interest differs from that of bill discount, inasmuch as only the actual duration of the loan is decisive. A fixed minimum number of days is calculated only in an exceptional case (cf. p. 191). The month is not reckoned at thirty days, as in the case of bill purchases; the actual number of calendar days is calculated. Interest is payable only when the loan is discharged, but every three months at the latest, and, if possible, before the close of the calendar quarter. The minimum amount of interest to be paid, formerly 50 pfennigs for each certificate, was raised to its present rate of 1 mark in 1896.

MINIMUM AMOUNT OF LOANS.

Loans are not as a rule granted in amounts of less than 500 marks. In order to make the advantages of its lombard system accessible to the lowest classes, however, the Bank adopted in 1893 the practice of giving loans in amounts down to 100 marks to non-business people when bonds of the Empire or of a German federal state are deposited. All suitable domestic securities have been admitted as basis for these small loans since 1895.

THE LOAN CERTIFICATE (PFANDSCHEIN) USED LIKE A CURRENT ACCOUNT.

Owing to the right conceded to borrowers of paying off installments on the loan debt at any time, numerous certificates have assumed the character of a covered

current account (cf. p. 187). It is the custom for bankers to use the lombard credit of the Reichsbank in this manner When in temporary need of money, they often prefer to take a lombard loan rather than to discount bills, although the lombard rate of interest exceeds the discount by I per cent. In the sale of bills the interest is deducted for the total period they have to run, even when the discounting person has no use at all for the money during the whole time. In the case of a lombard loan, on the contrary, the taker of the loan pays interest only for the calendar days during which he has actually had the capital (for ultimo loans, cf. p. 191). The lombard arrangements of the Reichsbank consequently facilitate the banker's business plans, and allow him to turn his moneys to better Through the close connection which the banker makes between the lombard system and the transfer account by having credits taken by him entered to his account, and paying off installments on the loan by means of checks, he assures himself of all the advantages of the "comptes courants d'avances," which are so popular at the Bank of France.

The usefulness of the lombard system in this form appears most vividly on great settling days, when sums of money collected for impending payments are again withdrawn from the banks. During the short time intervening between the withdrawal of the money at the banks and its reflux to the same the banker often procures the means of making further grants of credit by making use of the lombard system of the Reichsbank. The banker can invest money which he is sure will come in during the next few days because he helps himself over the interme-

diate time with lombard advances, an advantage which benefits not only the banker, but the whole national economic system, and which is of special importance in the stringency at the change of quarters. The lombard holdings of the Reichsbank therefore swell regularly a few days before these fixed dates and decrease just as quickly in the next two weeks.

MEASURES AGAINST THE IMPROPER USE OF LOMBARD ARRANGEMENTS ON THE PART OF SPECULATORS.

Such convenient arrangements can be abused. As a matter of fact, bankers' loans on securities and bills in great amounts have in former years often been taken for two days at the close of the month, apparently for purposes of ultimo settlements. As early as 1880 the Reichsbank reserved the right of calculating interest for at least three days on loans made on the last four working days or on the first working day of the month (which it could not well refuse), even though the loan should be repaid earlier. This term was increased in the next year to five days, and half a year later to eight days. To prevent any abuse on the part of the Bourses, interest for full fourteen days has been calculated since 1887 on these so-called ultimo loans when they are taken at the change of quarter. An exception is made at the branches only in case such takers of loans have nothing to do with speculation on the Bourse. The customary calculation of interest for the actual duration is employed even in the case of loans taken by these persons at the change of month or quarter. The same is true of all advances granted in lombard loans on merchandise.

LOMBARD LOANS AT SUBOFFICES.

The lombard system of each circuit is managed by the independent branch. This office makes out the certificates for the whole circuit, also for the suboffices. Furthermore, it takes into custody all pledged securities and bills. Only a few large suboffices managed by two or more officers, and on this account recently endowed with extended powers, may take charge of lombard effects deposited with them. But the functions of all other suboffices have gradually been considerably extended. Lombard loans have since that time been dispatched at suboffices with the same ease and simplicity as at independent branches, apart from a few restrictions not affecting the rapid settlement of transactions.

The Reichsbank took over its lombard system from the Prussian Bank in the forms described, which are on the whole simple and equal in principle in the case of all kinds of pledges. The Bank then transferred it to the branches in the federal states outside Prussia and in the imperial provinces of Alsace and Lorraine, so far as this had not already been done by the Prussian Bank, with trifling modifications depending upon the legislation of the land. Since that time a number of facilities, the chief of which have already been mentioned, have been made. This branch of business has thus received frequent impulses, but the organization has thus far been only slightly affected.

MOVEMENT OF LOMBARD HOLDINGS.

Lombard investments are not by any means so dependent on the general economic development as bill investments. First, the credits of the Reichsbank in lombard transactions are apt to be claimed by a considerable number of private persons and corporate bodies whose need of credit is scarcely influenced by economic conditions at large. Measures of bank policy working against the influence of economic development have brought at times an increase of loans, and at times have helped to limit lombard investments which have increased too much in comparison with the bill holdings of the Bank.

The introduction of a preferential interest rate for advances on German imperial and state bonds, which, as already mentioned, took place in March, 1884, worked in the first direction, and has promoted the lombard business of the Bank—a business then depressed owing to the favorable condition of the money market—and also favored the placing of lines of standard securities (Standard papiere). The average lombard investments increased in consequence from 45,800,000 marks in 1883 to 49,120,000 marks in 1884, in spite of increasing liquidity on the money market. A pronounced advance began with the economic upward trend of 1889 and 1890, and again from 1895 on. The average investment reached its zenith in 1897 with 108,300,000 marks, and at the end of 1895 and 1896 even the conceded maximum amount was exceeded: lombard investments ran on these return days to 211,200,000 and 197,200,000 marks, respectively. With the abolition of the preferential rate for advances on imperial and state bonds on July 1, 1897, the development took a different turn. Even in 1898 lombard investments declined to 96,400,000 marks,

and sank by 1900 to 80,000,000 marks, that is, in a time in which increasing economic activity entailed heavier claims of credit on the Bank.

The ranges between the highest and lowest amounts of lombard investments at any time within the several years are particularly large, since loans are often taken for short periods at the monthly and quarterly endings. The claims on the Reichsbank at monthly and quarterly periods, which, especially in former years, were made partially to help takers of loans over the ultimo settlement, have been curbed in some degree by the calculation of at least eight or fourteen days' interest on such loans.

The ratio of lombard investments to the total profitbringing invested capital of the Reichsbank has amounted, on an average, in 1876 to 11.2 per cent. In the course of twenty-five years' development the ratio to the total invested capital has fluctuated between 15.5 per cent in 1891 and 8.9 per cent in 1899 and 1900. Since 1897 it has constantly diminished as a result of the abolition of the preferential rate of interest for advances on imperial The number of certificates which and state bonds. admit of a conclusion regarding the number of persons taking loans has ranged between 4,544 at the end of 1881 and 9,083 at the end of 1895. The average amount of loans was, in 1900, 19,476 marks; since 1895, when it was 13,430 marks, it has constantly increased. Conversely, the mean duration of loans in recent years shows a recurrent movement. It fluctuated between thirtyfour days in 1876 and 1892 and seventeen days in 1899 and 1900. In times of abundant money it showed, as a

rule, a tendency to increase and in times of rising rates of interest to decrease; it has, however, been influenced in its movements by the above-mentioned measures of bank policy.

COMPOSITION OF LOMBARD INVESTMENTS.

The basis of lombard investments of the Reichsbank has changed somewhat in the course of years. growth of mobile capital in the form of securities was the main reason that lombard loans on merchandise were gradually forced into the background. Whereas at the establishment of the Reichsbank the ratio of sums advanced on goods to the total sum advanced amounted to 18.6 per cent and the ratio of sums advanced on securities to 80.2 per cent, this was altered by 1896 to 3.7 per cent and 94.1 per cent, respectively. Since the abolition of the preferential rate in advances on German securities in 1897 (cf. pp. 175, 193, and 274) the ratio of amounts lent on goods to the total of loans rose again to 5.3 per cent in 1900, while, conversely, that of the outstanding claims on securities sank to 86.7 per cent. Since 1897 lombard loans on effects have greatly decreased, while lombard loans on merchandise have remained nearly the same.

Lombard loans on securities show interesting changes with respect to pledges. Railway papers, on which, in 1876, 57.2 per cent of all outstanding loans on securities were advanced, almost disappeared from pledge holdings by 1893, as the state took over all important private railways. Through the preference extended to German securities since 1884 this development was accelerated, just as the composition of the holdings of securities has, on the whole, been steadily and permanently influenced.

To what extent the displacement has taken place since the introduction of the preferential rate of interest is seen from the fact that in 1883 on an average only 59.8 per cent of all loans on securities were covered by state papers—the large amount of foreign securities included—as well as by bonds of numerous German towns, whereas, according to statistics collected on June 5, 1897, 81.5 per cent of all advances granted on securities were secured by bonds issued directly by the Empire or a German state.

It is, however, a recognized principle, generally followed by all central banks of issue, not to base lombard investments on one kind of security, even when this has the solidity of German state papers, but to distribute on as many kinds of pledges as practicable the risk of possible losses and default in the reflux from lombard investments. The number of admissible securities has therefore been continuously increased, particularly since 1890, by the bonds (*Pfandbriefe*) of solid German mortgage banks.

The movements of amounts lent out on bills do not show any regularity. The ratio of these amounts to the total fluctuated between 0.9 per cent in 1876 and 8 per cent in 1900. Loans on bills have an accidental, exceptional character, and are used only when special circumstances arise which make it more expedient for the holder to take a loan instead of discounting the bills. Lombard loans on bills have therefore only temporarily attained any importance.

The lombard loans of the Reichsbank on precious metals are of secondary importance. The amounts

lent have only twice reached the sum of 1½ million marks since the existence of the Bank—in 1882 and 1891. As a rule, they amounted to only a few thousand marks, mostly taken by jewelers on bullion or by collectors of coins on rare coins.

According to statistics which were drawn up on September 30, 1900, of the various kinds of business undertakings which claim the lombard credit of the Reichsbank, the banks and bankers participated in a conspicuous degree. According to the number of certificates they take third place, although according to the number of existing businesses they are far behind all other classes. Their conspicuous importance for the lombard business of the Reichsbank is evident, however, from the fact that according to amount they have 40.6 per cent of all outstanding loans-much more numerous and much higher amounts than all others. In connection with this, however, it must be remembered that on quarterly settling days the claims of banks and bankers generally assume extraordinary proportions. Other trades make relatively smaller demands in this branch of business-30.2 per cent according to number and 16.6 per cent according to amount of all outstanding lombard claims. The loans granted to private persons are naturally still smaller in proportion-26.5 per cent of all certificates, but only 7.2 per cent of the total amount of loans. The claims of manufacturers and industrial companies represented on an average 12.2 per cent according to number and 12.3 per cent according to amount. The average amount of loans granted to public savings banks and cooperative societies was very large.

LOMBARD LOANS IN THE DIFFERENT ECONOMIC DIVISIONS OF THE EMPIRE.

The economic territorial divisions of Germany participate rather unequally in the lombard loans of the Reichsbank. They have attained a great importance only in Prussia, especially in the banking centres, like Berlin, and in the predominantly agricultural provinces of the East and Northeast. Of all lombard loans granted in 1900, 12.61 a per cent, according to amount, belonged to Berlin, and 79.1 per cent to the whole of Prussia, several small states included. In the industrial western provinces, in the kingdom of Saxony, and in South Germany, lombard loans are less than bill purchases; they are especially insignificant at the branches in Bavaria on account of the stamp duty levied on lombard transactions there. Not one-thirtieth of I per cent of the loans granted in that year were made to these branches. This unequal development at the various branches, in contrast with the commercial and industrial importance of large provinces, confirms the fact that the lombard loan is not bound up with the production and sale of commodities to the same extent as is the bill. The lombard credit of the Reichsbank is dearer than its bill credit and dearer than the credit of numerous private financial institutions competing successfully with the Reichsbank in these fields, which represent the seat of wealth. The lombard credit of the Reichsbank is, therefore, claimed less in those places than in the eastern provinces, which are even to-day less richly supplied with credit institutions, and which, besides, have always been accustomed to reckon with higher interest

^aIn 1880 it was 44.2 per cent.

rates. The variety in the different economic divisions with respect to lombard loans is explained historically by the activity of the Prussian Bank for decades, which for a long time was for large parts of the country the only great source of credit, and there, under more favorable conditions than those of to-day, made natural and customary the claiming of credit on a lombard loan. In those days the lombard business was generally of greater importance than to-day; lombard investments, at the end of the forties for instance, for a long time surpassed bill holdings.

The Reichsbank could not have the same success with its lombard loans at all branches, even if the economic conditions had been everywhere the same. Yet it managed to make continuous progress in introducing this business in the federal states outside of Prussia. The ratio of the loans given in those states to the total loans has increased since 1876 from 4.4 per cent to 20.9 per cent, and in Prussia it has correspondingly declined; whereas lombard transactions have increased threefold in Prussia, they have increased more than sixteenfold in other states. Bavaria alone is an exception, for the reason already mentioned.

The composition of pledged securities is also different in the various economic districts of the country. The ratio of pledged German imperial and state securities to the total of pledged securities held by the Bank, which was 63.9 per cent on September 7, 1900, becomes smaller and smaller the farther one goes from the seats of wealth and industry in western and southern Germany. In many bank circuits it exceeds 80 per cent—e. g., in Cologne, Essen, Hamburg, Frankfort-on-the-Main, Mannheim; it sinks, on the con-

trary, in Elbing as low as 20.8 per cent, while in the same place the mortgage bonds (*Pfandbriefe*) of the Landschaften reached 65.4 per cent, which, conversely, are scarcely represented in the West and South. Conditions are similar with respect to the ratio of loans on collateral to total loans granted by the Bank.

Of all Landschaften mortgage bonds pledged with the Bank, 92.8 per cent come from the provinces of East and West Prussia, Pomerania, Posen, Brandenburg, Silesia, Lübeck, Mecklenburg, and Schleswig-Holstein. That part of Germany east of the Elbe is the oldest and most important district for the development of Landschaften, the mortgage bonds of which here find their natural market. Forty-four per cent of pledged mortgage bonds of German mortgage banks (*Hypothekenbanken*) are given in these provinces. These are still more strongly represented in the Rhineland and Westphalia, central and southern Germany, where the Landschaften are partly replaced by joint-stock land credit institutions (*Grundkreditinstitute auf Aktien*).

Advances on foreign securities have always been made to a moderate extent. They represented only 2.6 per cent of all pledged securities. Only at one branch did they reach 11.5 per cent.

Loans on merchandise are now limited almost entirely to the east and northeast of Germany. Thus, of the loans granted against deposits of goods to a total amount of 2,997,100 marks on September 7, 1900, the greatest part, 2,911,500 marks, or 97.2 per cent, belonged to eastern and northeastern Germany. The industries connected with spirits, grain, and wood, also the trade in these

products, find there their natural basis. The commercial towns on the Baltic Sea and its tributaries are natural marts for Russian wood and grain and for the productions of the agricultural inhabitants of the East. The satisfaction of the need for money in these provinces is even to-day assigned mostly to the Reichsbank; lombard loans on goods are common there from olden times, whereas in the rest of Germany the pledging of merchandise is often contrary to mercantile usage.

PROFITS AND LOSSES.

The interest profits of lombard loans (cf. Table 57) increased with strong fluctuations from 2,650,000 marks in 1876 to 5,090,000 marks in 1900. The year 1886 brought the smallest proceeds, only 1,980,000 marks, also the lowest discount profit during the existence of the Bank; the year 1900 showed the highest, with 5,090,000 marks. The ratio of lombard profits of the Reichsbank (cf. Table 79) to total profits fluctuated between 9.8 per cent in 1900 and 17 per cent in 1892.

The Reichsbank has suffered only small losses in its lombard transactions, much smaller, comparatively speaking, than in the purchase and discount of bills. During the Bank's existence, loans to a total amount of 157,931 marks have remained unpaid when overdue, that is, 6.49 of each million marks of loans granted; of these, 72,120 marks—that is, only 86 pfennigs on each thousand marks of the total profits obtained in the twenty-five years in this branch of business, or 2.96 marks of each million granted in loans—had to be charged to loss.

CHAPTER VII.

DISCOUNTS.

PRELIMINARY REMARKS.

CONCEPTION AND IMPORTANCE OF DISCOUNTS.

The most important and likewise the most difficult task of the Bank is to bring about the greatest possible equalization of fluctuations in money demands and to be at all times in a position to redeem its notes and to meet its other demand liabilities. The maintenance of the Bank's solvency coincides with the maintenance of the imperial standard. The notes issued by the Bank form so large a part of the total German currency that a refusal to redeem them for sterling money and the consequent depreciation of the notes would bring about a collapse of the German monetary system. Let us develop this point theoretically.

According to the provisions of the Bank Act, the cover for the notes issued by the Reichsbank consists in current German money, gold in bars or foreign coins, imperial treasury notes, and discounted bills maturing within three months (cf. pp. 69 ff. and 125). There is no such provision with regard to cover for all demand liabilities; besides the prescribed cover for notes, notes of other German banks of issue, discounted securities, and lombard loans must be taken into account.

Of these means of cover, only metal reserve is immediately available for the redemption of notes and the payment of reclaimed deposits. The Bank must therefore arrange that its metal reserve is sufficient to meet all

claims arising from its note issue and total demand liabilities. The Bank Act prescribes that at least one-third of the notes of the Reichsbank must be covered by metal and imperial treasury notes, and sets a limit for the issue of notes in excess of cash holdings (metal, imperial treasury notes, and notes of other banks); if this limit is exceeded, a 5 per cent tax is charged on the excess of issued notes (cf. pp. 22 and 81 ff.). All such measures, however, if they are not to do more harm than good, must be so interpreted as not to restrict the elasticity of note issue; they must therefore allow full scope to the discretion of the Bank officials.

The ways and means at the disposal of the management of a large bank of issue for maintaining a satisfactory proportion between its cash holdings and its liabilities, especially its notes, are naturally determined by the circumstances which can displace this proportion.

The Bank can be deprived of ready money by the presentation of notes for redemption and by the withdrawal of deposits. In the latter case the liabilities of the Bank diminish to the same extent as its cash holdings, but as the cash reserve is always considerably smaller than the total liabilities the absolute decrease means in percentage a greater diminution of cash, and consequently a decrease of the percentage of cover.

Cash holdings can also suffer a diminution by the discounting of bills, the granting of lombard loans, etc., when the taker of credit requires the amount in ready money. Here there occurs a decrease of cash holdings although notes and other liabilities are unchanged. Should the taker of credit require the amount in notes,

or should he have it entered on his transfer account (Girokonto), then an increase of note issue or other demand liabilities is effected, while the cash holdings are unchanged. An extension of credit granted by the Bank must consequently effect a deterioration of cash cover for notes and other liabilities; the liabilities covered by claims on bills and loans increase at the expense of cash cover.

An increase of notes and of other demand liabilities can occur also through an increase of the invested capital through the delivery of gold and coined German money against notes or for entry on transfer accounts. In the latter case the cash holdings increase by the same absolute amount, but on this account to a relatively greater extent than the liabilities; the ratio of cash to notes and other liabilities improves.

The Bank can consequently check a depreciation of cover by measures which counteract too great an increase of investments and are conducive to bring in cash.

The Bank's investments are determined chiefly by the domestic demand for short credit. As the Bank can not, without great severity, arbitrarily refuse applications for credit, provided they meet the requirements of the Bank Act, it has no other alternative but to regulate calls for credit indirectly by adjusting the interest rate at which it is ready to grant credit. Owing to the preponderating importance of investments in bills, the discount rate is practically the only one to be taken into account. As in the case of merchandise, a high rate restricts and a low rate stimulates the demand; a high interest rate limiting the demands for credit counteracts an excessive extension

of note circulation and prevents a decrease of the metal reserve of the Bank.

At the same time, a high discount rate is calculated to attract gold from abroad and to prevent a flow of gold to other countries, because it offers a favorable opportunity for the investment of international capital.

The adjustment of the interest rate is the only effective means for regulating the domestic demand for money. For influencing cash movements between home and abroad, the interest rate, it is true, is not the only means, but, as is acknowledged by all authorities, it is by far the most important and effective. Certain other measures of less importance must be taken into account. These are for the purpose of making the importation of gold easier and the exportation more difficult; to these belong advances (free of interest) on gold importations and changes in the purchase and selling prices of gold in bars and foreign coins. Such measures are, however, of secondary importance alongside the systematical regulation of the discount rate, the so-called discount policy.

DISCOUNTS AND THE NOTE TAX.

In the Bank Act of March 14, 1875, the attempt is made to force mechanically the German banks of issue, including the Reichsbank, to adopt a proper discount policy. The 5 per cent tax on uncovered notes exceeding a fixed amount aims to make banks work against too great an increase of uncovered notes through a high interest rate covering the note tax. "The higher tax rate," accord-

^aBesides the 5 per cent note tax on uncovered notes in excess of the contingent, a tax of 1 per cent on all uncovered notes was provided for in the outline of the Bank Act; it was, however, removed by the Reichstag.

ing to the argument to the outline of the Bank Act, "causes banks to meet an increasing demand of the money market with advancing prices, as is the rule in all other markets; with an advanced discount rate to pay the higher tax they are able to satisfy the extraordinary demand which called forth this advance; and thus, through an increase of the discount rates, the higher tax allures capital, moderates the spirit of speculation, causes banks to keep their note circulation within the regular limit as soon as the extraordinary demand is past. By urging banks to increase discount rates, the high tax will steady the fluctuations of the discount rate, and meet without any disturbing interference the dangerous tendency of trade to retain the uncovered notes once gained."

The system of taxing notes could not, however, become a decisive influence in the discount policy of the Reichsbank.

Not the absolute amount of uncovered notes determines the safety of note redemption, but the proportion between cash holdings and notes, and between cash holdings and total demand liabilities (including transfer deposits); not only the amount but also the nature of money demands must be taken into account in the discount policy of a central bank. A flow of gold to other countries makes sharper preventive measures necessary than does a temporary withdrawal of gold for domestic trade. A money demand based on overspeculation and overproduction requires sharper restrictions than the normal, periodically recurring increased demand for money at the turn of the month and year. All these differences can not be ex-

pressed in figures, and therefore the discount policy can not be regulated in accordance with a purely mechanical principle.

The note-tax system could, therefore, guide the discount policy of the Reichsbank only in a general way, and could not take the place of constant care and vigilance on the part of the Bank officials. The proper consideration of all circumstances often forced the Bank officials to raise the discounts in cases where the note contingent was not exceeded, and, on the other hand, made it possible for the officials to maintain a lower discount rate than 5 per cent in cases where the contingent was exceeded; in this case the Bank had to bear the note tax by accepting a smaller income from discounts.

DISCOUNTS AND THE MONEY MARKET.

The Reichsbank in its discount policy could not bind itself strictly to the note-tax system; it was obliged to take into consideration the real factors dominating supply and demand in the money market. Even the most powerful central bank can not proceed arbitrarily in fixing its interest rate; it is dependent on the open money market and can not dictate the interest rates, although it intervenes and regulates within narrow limits. A bank of issue discount rate which is considerably higher than the rate of the open market would be avoided as much as possible by seekers of credit, and would soon be obliged, if its funds lay idle and it desired to have transactions with the business world, to conform to the open market by reducing its interest rate. Conversely, a discount rate which is much lower than the market rate would increase credit claims,

diminish cash holdings, extend liabilities, and in the long run make questionable the ability to redeem notes and to make cash payments from the balances of deposits. Each shakening of confidence in the stability of the Bank and in the solidity of the standard invariably leads—apart from all other evil results—to an advance in the interest rate. To avoid this advance would involve an incorrect and hopeless policy.

One must always bear in mind these narrow confines in criticising the discount policy of a central bank, particularly when one compares central banks of various countries whose wealth and economic development differ considerably from one another. Only a calm and pertinent consideration of the real circumstances which determine the interest rate for short credits makes possible an objective judgment of the discount policy of a great bank of issue.

THE ACTIVITY OF THE REICHSBANK FROM 1876 TO 1900.

The extent and difficulty of the Reichsbank's tasks at its establishment, an appreciation of which is essential in forming an opinion on its discount policy, are attributable to the development of German national economic activity in the last twenty-five years, to the incomplete state of German coinage, at that time still in the process of transformation, finally, to the Reichsbank's position in the whole German bank system, and to the apparent attempts of private banks of issue to make difficult the execution of its policy. These circumstances shall be considered in turn.

THE ECONOMIC DEVELOPMENT OF GERMANY IN THE LAST QUARTER OF A CENTURY.

The unexampled rapid development of German economic life in the last quarter of a century could not be complete without an increased need for currency and an increase of claims on the central bank. A few figures will indicate the extent of the economic development of Germany during that time. The population of the Empire rose from 42,500,000 to 56,000,000 in the period 1875-1900. The value of foreign trade grew in the same time from 6,134,000,000 marks to 10,388,000,000 marks. The value of exports rose from 2,561,000,000 marks to 4,555,000,000 marks.a The mileage of German railways increased from 27,981 kilometers in 1875 to 49,930 kilometers at the end of the fiscal year 1898. The amount of the kilometer tons (Tonnenkilometer) forwarded on German railways increased from 10,400,000,000 to 32,700,000,000. The tonnage of seagoing vessels arriving with cargo in German ports amounted to 5,750,000 registered tons in 1875 and 16,500,000 in 1898. The production of raw iron within the revenue-producing area increased from 2,000,000 tons in 1875 to 8,100,000 tons in 1899. The consumption of raw iron increased in the same time from 2,300,000 to 8,600,000 tons. The output of coal (mineral coal and brown coal) rose from 47,800,000 to 135,800,000 tons, and the consumption from 47,500,000 to 136,900,000 tons. Since it is impossible to represent by statistics the development of German production and German trade, these few statements may serve to give a conception of the enormous increase

a Only provisional figures are given for 1900.

of German economic activity since the middle of the seventies. A comparison with the development in England and France shows up the economic development in Germany in a most favorable light. Whereas German exports rose in 1875-1900 from 2,561,000,000 marks to 4,555,000,000, the exports of England increased only from £223,500,000 to £291,500,000, and the exports of France only from 3,873,000,000 francs to 4,078,000,000.a German exports, which in 1875 were not much more than half the English and less than the French by some 15 per cent, are now less than the English exports by only one-fourth or one-fifth and greater than the French by two-fifths; they have risen by 78 per cent in twentyfive years, whereas the English have increased by 35 per cent and the French by 51/3 per cent. It can be inferred from this how much more rapidly German economic activity has developed in the last quarter of a century than that of both European countries mentioned. When one considers further that this intensive development has been based on smaller national wealth, one realizes how much more all means and forces, especially money and capital, have been utilized in Germany than in those lands, which in the seventies had accumulated more capital and, in comparison with Germany, had already developed economically to a certain fixed point.

Each increase of economic activity means an increase of the transactions to be adjusted by money. Trade tries first of all to meet the increased demand for currency by supplementing circulating money with more bills, which, within certain bounds, can take the place of the money.

^aThe figures for French exports in the year 1900 are similarly only provisional.

The stamp duty on bills (cf. Table 55) enables us to calculate the bills annually drawn in Germany; the amount for 1876 is estimated at 12,900,000,000 marks and for 1900 at 23,300,000,000 marks. Since the use of bills as a means of payment is limited, most bills reach the banks for discount. The increased needs of trade for suitable means of payment, for cash and bank notes, was expressed in increased claims on the Reichsbank, since the Reichsbank is the medium for the influx of gold from abroad and has the power, through note privilege, to increase materially the volume of circulation by the issue of notes not covered by metal. Thus each substantial increase of German monetary circulation proceeds only from the Reichsbank—at any rate, occurs through the agency of the Reichsbank. The claims on the Bank can be seen from its capital invested in bill and loan transactions. In 1875, the capital invested by the Prussian Bank in these branches of business amounted to 421,300,000 marks; the average investments of the Reichsbank a was 454,200,000 marks in the first year of its existence (1876), 909,200,000 marks in 1899; they have therefore doubled in the course of the quarter of a century.

An increase in the periodical fluctuations began with the advance in general money demands. The investments of the Reichsbank in 1876 fluctuated between 387,600,000 and 524,700,000 marks; the difference between maximum and minimum amounted therefore to only 137,100,000 marks, whereas the investments ranged in 1899 between 634,700,000 and 1,251,400,000 marks, a difference between maximum and minimum of 616,700,000 marks.

a Inclusive of discounted exchequer bills and other discounted securities.

The demand for money set for the Reichsbank a double task.

In order to meet the advanced demands arising from the increase in transactions, the Reichsbank was obliged to direct its efforts to a more intensive utilization of the existing currency through the introduction and development of cash-saving methods of payment (transfer and clearing systems, cf. p. 87 ff.), and to endeavor to bring about an increase in monetary circulation; an increase of its uncovered notes was possible only within the limits set for covered notes, and therefore the necessary additions to the currency had to be made by drawing gold from abroad.

The increased fluctuations in money demands on the Reichsbank forced the Bank officials, in times of smaller strain, to keep reserves sufficient for the probable advance in the calls for credit, and, uninfluenced by the impressions of the moment, to base its measures on the development of longer periods.

THE INTRODUCTION AND MAINTENANCE OF THE IMPERIAL STANDARD

The claims on the Reichsbank arising from the German monetary standard were not less significant. At the time the Reichsbank commenced its activity Germany was in a state of transition from the silver to the gold standard. The Coinage Act of July 9, 1873, had set up the imperial gold standard as the first aim of German coinage reform, and the imperial government had been busy since that time in doing away with German silver circulation, so far as silver money was not necessary to small trade, and in replacing it by a preponderating gold circulation. The

solution of this problem had not advanced far at the beginning of 1876. The French war indemnity had rendered it possible for the imperial government to procure and coin considerable quantities of gold. On the other hand, only a small beginning was made with the discarding of silver; not much more than 1,000,000 pounds of silver were sold, whereas ten or twelve times that quantity had to be forced from circulation to carry out the coinage reform as planned. Only 368,000,000 marks in silver coins of the states were withdrawn, and of this amount 164,000,000 marks had been coined into imperial silver coins. The existing stock of silver coins of the various states amounted at that time to 1,165,000,000 marks. Of imperial gold coins 1,275,000,000 marks were coined; of these, however, 85,000,000 marks were again melted down and exported. All in all, not quite half of the German monetary circulation at the beginning of 1876 consisted of gold—the metal which was to be the new German standard. The Reichsbank thus inherited the task of cooperating to its utmost power in carrying out the coinage reform.

As the price of silver had since the beginning of coinage reform sunk nearly 10 per cent below the mint ratio of 15½ to 1 between gold and silver upon which the change of standards was based, great danger arose that the German standard would sink below the gold parity attached to it by the Coinage Act because silver money was still so large a part of German circulation. Even in normal times the maintenance of the legal standard, especially the watching and regulating of foreign relations of the national monetary system, was one of the foremost

duties of a central bank. Still more is this the case during a state of transition, such as German monetary affairs were passing through at that time. A flow of gold to another country or any other derangement could, under such circumstances, more easily become fatal for the standard than under normal circumstances; the danger of an agio formation at home and a shock to foreign rates of exchange is considerably greater. In such times, therefore, the policy of the Bank must be influenced more than usual by considerations for the standard and for international gold movements.

A standard is absolutely assured at home and abroad only so long as the central bank meets its obligations on demand in full value standard money. The success of the German coinage reform depended on whether the Reichsbank would always be in a position to make its payments in gold of full value. In order to fulfill this condition, the Reichsbank was obliged to provide not only for a sufficient cash cover, but also for a sufficient gold cover of its liabilities, a task which was naturally more difficult since the existing silver money still exceeded the demand of trade for silver coins.

THE COMPETITION OF PRIVATE BANKS OF ISSUE.

The fulfillment of the great claims made on the Reichsbank as a result of the development of German economic activity and of the condition of German monetary affairs, was to a certain degree rendered more difficult by the Bank Act of 1875, which assigned to the private banks of issue a position side by side with the Reichsbank. As has already been mentioned in the introduction to this

memorial volume (Denkschrift), the Bank Act deals with the Reichsbank as a future central bank on the same footing as private banks of issue (cf. p. 36 ff.). The measure providing for a one-third cover for notes and, above all, the indirect limitation of uncovered notes by the 5 per cent note tax applies to the Reichsbank just as to private banks of issue. As already mentioned (cf. pp. 38 and 39), a great inequality has developed in practice from this formal equality, since the Reichsbank, which as central bank of issue is and wants to be the last resort of German monetary operations, never disposes further of inland bills discounted by it (cf. p. 126), and depends on no other bank, but, standing alone, meets the fluctuations of credit demands; the private banks of issue depend on the Reichsbank and, in case their funds run short, procure for themselves new means by disposing again of the bills discounted by them. In conjunction with the system of note tax, the following situation arises: since private banks of issue can shift to the Reichsbank each increased call for money, they are able to use the tax-free note contingents assigned to them up to the limit, in times of a quiet demand for money, by bidding below the discount rate of the Reichsbank, without fearing excesses of note contingent therefrom, and the private banks of issue have made use of this possibility to a great extent. The Reichsbank, on the other hand, which alone bears all fluctuations in the German money demand, must always hold, even in quiet times, such a strong reserve that it can meet the great fluctuations of all German money demands, although its average uncovered note circulation has in a number of years been less than

that of the private banks of issue. This end can be attained only through an exceedingly careful discount policy.

The difficulty is increased by the natural endeavor of private banks of issue to make the greatest possible use of the funds at their disposal; frequently these banks collide with the aims of the Reichsbank. The domination of the money market by a central bank is possible only within certain bounds, and the Reichsbank's task is, of course, rendered more difficult when private banks issue notes to furnish money to the market at a rate lower than that which the Reichsbank, from an economic standpoint, deems desirable and right.

THE HISTORY OF THE DISCOUNT POLICY OF THE REICHS-BANK.

THE VARIOUS PERIODS OF THE BUSINESS ACTIVITY OF THE REICHSBANK.

The conditions under which the Reichsbank has had to work during the twenty-five years of its existence have been outlined; its bank policy will now be presented historically.

When one surveys the whole business activity of the Reichsbank, single phases can be distinguished, in spite of the unmistakable tendency toward a strong expansion in all branches.

From the beginning of the Reichsbank's activity until 1879, its interest-bearing investments and its uncovered notes decreased, and its interest rate was beginning to fall. Then followed a movement in the opposite direction which reached its climax in 1882. The following years brought a standstill or an insignificant increase in investments

and, together with a heavy increase of balances on transfer accounts, a diminution of uncovered notes, which disappeared in the average of 1888; the average discount rate was considerably lower than the level from 1880 to 1882. The years 1889 and 1890 brought a considerable increase in investments, uncovered notes, and discounts. that we observe again a cessation in the development of investments, a heavy decrease in uncovered notes, and another decline in the Bank's interest rate. This continued into 1895, with only a slight break in 1893. 1895 the investments of the Reichsbank have expanded more than ever before: uncovered notes have never reached the figures of that time, and the Reichsbank's interest rate has risen so high since the strong decline in the first half of the nineties that its average and its highest point exceed all former rates of the Reichsbank.

The different phases in the development of the Reichsbank correspond to the various periods of German economic activity; these phases are reflections of all economic activity. Here is shown distinctly what a decisive influence the general economic development exercises on the conditions of the central bank, and how much the latter's policy is dependent on the forces and powers dominating the rise of the whole national economic system.

It appears advisable, therefore, to divide these periods of development in the historical presentation of the Reichsbank's discount policy.

General economic situation.—When the Reichsbank began its activity on January 1, 1876, German economic activity was still suffering from the effects of the great com-

mercial crisis of 1873. A heavy depression prevailed in most of the important branches of industry until 1879. The purchasing power, not only of the German market but also of the whole international market, was severely shaken: sales ceased, and the prices of the most important commodities showed a distinct decline. That the spirit of enterprise was prostrate is shown by the fact that new joint-stock companies, which had been formed with feverish haste from 1871 to 1873, dwindled into insignificance. Whereas during 1872 no less than 479 joint-stock companies, with a capital of nearly 1,500,000,000 marks, were organized in the German Empire, the number of new companies in 1878 was 42, with a capital of little more than 13,000,000 marks; as compared with those already existing, the new companies were limited in their operations in numerous ways.

The result of this stagnation in economic activity and of the fall of prices was a relatively small demand for money on the part of trade and industry. The requests for short credit had been declining continuously since 1873. The bills put in circulation throughout Germany amounted, according to the estimates based on bill stamps, to 14,100,000,000 marks for 1873, but only to 11,300,000,000 marks for 1878 and 1879.

The services of the central banking institution were less in demand owing to these circumstances. It might be expected that during this period the central bank had been able, with relatively smaller investments, to maintain a stable and low discount rate.

Effects of monetary reform.—Various circumstances, mainly those connected with the reform of German mone-

tary affairs, worked, however, in the opposite direction. It is necessary to go back to events which took place in the time of the Prussian Bank, the effects of which, however, applied in full force to the Reichsbank.

The French war indemnity had been settled quickly beyond all expectations. A great part of its proceeds, so far as they did not consist in metal, had been realized in gold for the purposes of coinage reform. From the middle of 1874 the natural reaction of the large transfer of cash to Germany began to appear. With a great abundance of money in Germany and a relative scarcity in the most important foreign money markets, specie began to flow out of Germany in the form of gold coins; since the depreciation of silver the weight of metal in current silver coins no longer corresponded to their nominal value. These conditions continued with various sharp breaks until 1879. The German stock of specie, which had increased from about 1,985,000,000 marks to 2,805,000,000 marks from the beginning of the coinage reform until the middle of 1873, again diminished, largely through a flow to foreign countries, to about 2,420,000,000 marks at the beginning of 1879. Each outflow of gold was doubly disturbing on account of the great amount of silver money still existing, and the central bank found itself forced to counteract the exportation of gold by raising the discount rate.

Conditions were most threatening from the middle of 1874 to the middle of 1875—that is, in the last years of the Prussian Bank. The outflow of gold, especially to Belgium and France, became so great that the introduction of the gold standard was often regarded as frustrated. The Prussian Bank in self-defense raised its discount rate

to 6 per cent on November 23, 1874, without appreciable success, however, for with the plentiful supply of money on the open market, the discount of the Bourse remained 2½ per cent below the Bank discount. The fact that the banks, including the Prussian Bank, refused to part with any more gold brought about no improvement; the result, on the contrary, was that a premium was paid for imperial gold coins, that foreign rates of exchange were far from parity (to the disadvantage of Germany), and that short bills on London sometimes reached an exchange of 20.65 and short bills on Paris an exchange of 81.85. The whole course of events during this critical period gives an idea of the difficulties under which the Reichsbank worked.

The increase of circulating capital in German markets, which more than anything else was the cause of the outflow of gold in 1874-75, experienced a violent interruption for reasons connected with carrying out the German monetary reform. This change was effected partly by the imperial government, which proceeded from the middle of 1875 to withdraw the silver coins of the various states in large quantities, and in the second half of 1875 to replace with imperial treasury notes the paper money of the various states and its substitutions. This helped to bring about a contraction of the money market. The preparations for carrying out the bank reform were, however, of the greatest importance, many banks of issue relinquished their note privilege before the new arrangements went into force, and were therefore obliged to withdraw their notes from circulation by the beginning of 1876. Furthermore, notes for amounts less than 100 marks were to be done away with by the beginning of 1876, and as early as July 1, 1875 notes of this kind received at banks could not be reissued. The banks were obliged to keep cash on hand for the redemption of small notes which could not be replaced by notes over 100 marks. There was a considerable amount of such notes. Altogether, the uncovered notes of German banks diminished by more than 270,000,000 marks from the end of 1874 to the end of 1875, principally in consequence of the abolition of small notes.

The second half of 1875 brought a substantial diminution of German currency; this resulted in more calls on the Prussian Bank, which even before the date fixed for its transformation into the Reichsbank was extending its business beyond the borders of Prussia.

The limiting of circulation also resulted in a slow advance of German market discount, beginning May and June, 1875. Whereas Germany in the preceding months had had the lowest market discount of all European countries, a change now took place. Foreign rates of exchange were forced down so far that in the last months of 1876 they permitted a considerable importation of gold.

Although the Prussian Bank, was in the last half year of its existence, relieved of acute uneasiness about an outflow of gold, it was now forced to adopt a severe discount policy through the limitation of inland circulation which affected the money market. The market discount rose occasionally to the height of the Bank's discount and thus forced the Bank to raise its rate.

The beginning of gold payments.—The situation which the Reichsbank found at the beginning of its activity was characterized most, however, through a measure of supreme importance for carrying out the change of standard, viz, through the beginning of gold payments by the Prussian Bank, in July 1875, by order from the office of the Chancellor (*Reichskanzleramt*).

Up to this time the Prussian Bank had, of course. taken care to gather considerable gold reserve, but it had made payments in gold only in exceptional cases: free circulation was still restricted principally to silver. The German central bank now opened its gold reservoir, gave German circulation the gold money which it required from its central banking institution, and took up rejected silver. With what rapidity German circulation took up gold coins is seen from the stock of gold of the Prussian Bank, which diminished by more than 150,000,000 marks from the middle until the end of 1875—from 493,000,000 to 341,000,000 marks—although during that time not only no outflow of gold to foreign countries took place, but a considerable influx occurred from abroad. Prussian Bank purchased during that half year nearly 70,000,000 marks' worth of gold. As its gold reserve diminished in spite of this by more than 150,000,000 marks, German domestic circulation took 220,000,000 marks of gold money during this half year from the Bank's coffers. This gold money replaced to a great extent the small notes which were at that time being discontinued and in part the silver money which at that time was being withdrawn. This silver money was taken mainly from the coffers of the Prussian Bank during the second half of 1875 to the amount of 45,000,000 In spite of this, the silver holdings of the Prussian Bank show during this time a decrease of only 15,000,000 marks. The explanation is that current silver was continually given up at the central bank in exchange for gold.

A continuation of this process of exchange was to be expected in the future. The position of the Reichsbank was rendered considerably more difficult as long as its holdings of German silver money were not diminished to the extent of the demand for silver coins.

On account of the state of the money market and the drainage of gold from the coffers of the Bank for domestic circulation, the transformation of the Prussian Bank into the Reichsbank took place under strained circumstances. In September, 1875, the Prussian Bank had been obliged to advance its discount rate to 6 per cent. At the end of November it thought it could take advantage of a temporary improvement in its position to reduce its rate to 5 per cent, but an extraordinary strain at the close of the year showed again the difficulty of its position. An examination of the situation forced the new Reichsbank to raise its discount rate to 6 per cent on the third day of its existence, January 3, 1876.

Limitation of working capital at the transformation of the Prussian Bank into the Reichsbank; protective measures of bank management, especially the reorganization of transfers.—Although the Prussian Bank had in the last years of its activity been obliged to work under exceedingly difficult conditions, several other new circumstances increased for the Reichsbank the existing difficulties.

The Prussian Bank had had at its disposal a large amount of interest-bearing deposits subject to notice, most of which were legally deposited trust moneys. At the end of 1875 these deposits amounted to 101,300,000 marks. After the transformation into the Reichsbank notice of withdrawal of trust moneys was given by Prussia (cf. p. 88).

The Prussian Bank had also an unrestricted note privilege, whereas the note issue of the Reichsbank was limited by the system of note tax.

Along with this substantial decrease of working funds, which was counterbalanced only partially by the increase of capital stock from 60,000,000 to 120,000,000 marks, came a greatly extended sphere of activity.

That the Reichsbank could, from the very beginning, satisfy claims was due to the fact that its capital stock. so far as it was not sunk in business sites, etc., was not invested in stocks and shares, as was the case with other large central banks, but was used with its other working capital for granting credit on discount bills and lombard It is true that the officials of the Reichsbank are of the opinion that the Bank's own means (capital stock and reserve fund) are first to be regarded as a guarantee fund for the creditors of the Bank, the holders of notes, holders of transfer accounts, etc. But the officials believe that they can invest this guarantee fund most safely and properly for the Bank by making it cooperate in its business; they therefore use it, not in the purchase of obligations on which payment can not be demanded immediately, but in the purchase of safe short-term bills and lombard loans.

The employment of the increased capital stock for credit grants could relieve the Reichsbank from seeking in new

ways the necessary reenforcement of its working capital. It has attained its end by reorganizing the transfer system on the basis of gratuitous transfers from place to place (cf. p. 90). This innovation has not only resulted in considerable advantage to the German national economic system by essentially facilitating and cheapening payment operations, but it has, in addition, brought to the Reichsbank, in the rapidly increasing transferaccount deposits, the working funds which it needed for fulfilling the task assigned to it. The transfer system on the new basis was inaugurated April 10, 1876. At the end of 1876 the balances on transfer accounts had already reached (inclusive of transfers in transit) 92,300,000 marks, against 17,200,000 marks on January 7, 1876. The decrease of interest-bearing deposits amounted to 59,000,000 marks, and was therefore balanced by the increase of transfer-account balances. When at the endof 1879 the interest-bearing deposits had disappeared, the transfer-account balances amounted to 155,000,000 marks

Abundance of money and the decrease of discounts of the Reichsbank from 1876 to 1879.—While the reorganization of the transfer system of the Reichsbank had in an unexpectedly short time and an unexpectedly rich measure compensated for the reduction of its working capital, the strain on the open market under which the Reichsbank had begun its operations disappeared soon after the beginning of 1876. This showed that the scarcity of money during the second half of 1875 was only an episode due to special causes, particularly to the abolition of small notes; it was not able to interrupt for

any length of time the development of the money market depending on general economic conditions. With continued economic depression and stagnation a relaxation of the money demands began. In that period the German money market seldom showed a greater strain. although from the beginning of 1876 the German stock of specie decreased almost uninterruptedly, due partly to large withdrawals of silver coins of various states partly to the outflow of gold to foreign countries. market rate of discount on the Berlin Bourse quently sank as low as 2 per cent—unusually low for that time—and the average bill investments of the Reichsbank decreased uninterruptedly after 1876; they sank from 403,000,000 marks in 1876 to about 328,000,000 marks in 1879. The increase of working capital through transfer-account deposits, and the decrease of credit claims had as a result that a large part of the funds of the Reichsbank frequently lay idle; it was difficult, in fact, for the Reichsbank to maintain the necessary confidence of the German business world in its discount system. Its uncovered note circulation, which at first had been regarded as unduly limited by the note tax, dwindled continuously and remained far below the contingent allowed by law. From an average of 199,000,000 marks in 1875 and 120,000,000 marks in 1876 it sank to 78,500,000 marks in 1879, while the tax-free contingent of the Reichsbank amounted at that time to 273,900,000 marks. The profits of the Bank declined correspondingly. Whereas the net profits of the Prussian Bank in 1874 had amounted to 12,753,000

marks,^a the profits of the Reichsbank, in spite of the doubling of the capital stock, sank to 6,924,000 marks in 1879.

Decrease of gold reserve and increase of metal holdings of the Reichsbank.—The considerations arising from coinage reform were, as before June 1875, in diametrical opposition to the conditions, which made it necessary for the Bank to cheapen its credit for purely business reasons.

In the Reichsbank the whole process of transformation was concentrated a great deal more than had been the case with the Prussian Bank. Not only was the Reichsbank the medium of international gold movements affecting Germany, but the international trade in precious metals brought gold to its coffers destined for Germany and took out of its coffers the gold needed abroad. Furthermore, domestic circulation continuously drew imperial gold coins from the Bank's coffers in exchange for the silver coins of the various states. Toward the end of 1876 the task of selling silver and realizing gold-necessary measures for coinage reform—was transferred to the Reichsbank by the imperial government. The procedure was as follows: the silver to be melted down and sold was drawn mainly from the reserve of the Reichsbank and the account of the Empire was debited with the amount. Silver coins were converted for the account of the Empire into bars at the mints and refineries. The silver bars were turned over to the Reichsbank to be sold. The greater part was disposed of in London through the

a The net gain of the year 1875 can not be compared, for it was increased considerably above the business proceeds of the Bank by the appraisement of the real estate ceded to the Reichsbank in excess of its book value.

agency of the London Joint Stock Bank. A small part of the proceeds of the silver sales in London was realized through drafts on the London Joint Stock Bank, the greater part by the purchase of gold on the London market. The proceeds, whether they came as German money, as in the case of silver sales in Germany and sales of drafts on London, or whether realized in uncoined gold, were not delivered to the imperial treasury, but were entered to the credit of the Empire's account, whereby 1,392 marks were reckoned for the pound (gold) fine. The acquired gold was therefore sold to the Reichsbank by the Empire against entry of the value on the account.

The effect was that the Reichsbank continually disposed of silver in return for gold. This counteracted the consequences of the exclusion of silver money from free circulation in exchange for imperial gold coins. Only these sales of silver for gold enabled the Reichsbank officials to keep up gold payments as long as considerable quantities of silver flowed to it from free circulation and large sums of gold money were drawn from it for free circulation.

But the selling of silver and procuring of gold by the Reichsbank did not keep pace with the influx of silver from, and the drainage of gold to, free circulation. The gold reserve of the Reichsbank sank from 346,000,000 marks at the beginning of 1876 to 180,000,000 marks at the end of 1878; indeed, at the end of October, 1878, it reached the low point of 164,000,000 marks. This decrease occurred notwithstanding that the Reichsbank bought more than 320,000,000 marks of gold in the three years 1876–78. Conversely, the silver holdings of the Reichsbank increased in the three years from 100,000,000 to

292,000,000 marks—by 192,000,000 marks. At times they even exceeded 300,000,000 marks, and yet the imperial government during this time took 447,000,000 marks of silver coins from the coffers of the Reichsbank to be melted down.

For the four years after the commencement of gold payments by the Prussian Bank the following changes in gold and silver holdings may be noted:

I.		narks.
	June 30, 1875	493-3
	Purchases of gold from July 1, 1875, to June 30, 1879	426.4
	Total	919.7
	June 30, 1879	
	Withdrawal from the Reichsbank	694. 3
2.	Silver:	
	June 30, 1875	
	June 30, 1879	320.7
	Increase from June 30, 1875, to June 30, 1879	218.7
	Taken in the same time from the Bank to be melted down	516.0
	Influx to the Bank from free circulation	734 · 7

The Bank therefore gave up 694,300,000 marks of gold in the first four years of gold payments. Of this, according to careful estimates, 130,000,000 marks may have gone to foreign countries, while the great remainder of about 565,000,000 marks was absorbed by inland circulation, which gave to the Bank 734,700,000 marks of silver money. As the sales of silver were dependent on the state of the silver market and could not be forced without shattering the purchasing capacity of the market, the sale of silver for gold was considerably less than the exchange of silver for gold effected by the German market at the offices of the Reichsbank. Thus it came about that

while the average metal cover of the Reichsbank's note circulation rose from $72\frac{1}{4}$ per cent to $79\frac{1}{3}$ per cent in the years 1875 to 1878, the average gold cover suffered a diminution from $60\frac{1}{4}$ to $33\frac{1}{3}$ per cent.

The warring factors influencing discounts and the rapid development of the discount rate.—Through these circumstances the officials of the Reichsbank were placed in a serious dilemma: the decrease of profit-yielding funds. the improvement of metallic cover for notes, the diminution of uncovered notes urged a reduction of discount and lombard rates. On the other hand, metal reserve was serviceable to the Bank only in so far as it consisted of gold, especially when there was a foreign demand for money. The constant deterioration of the gold reserve forced the Bank in particular instances, above all when foreign exchange rates were unfavorable, to take sharper preventive measures than would have been required under normal conditions of the standard, since the Bank itself was quite liquid. On the other hand, the effectiveness of rapid advances of discount was impaired by the open market, which was not, like the Reichsbank, obliged to distinguish anxiously between gold and silver, and often was only slightly influenced by the discount fixations of the Reichsbank, owing to the plentiful supply of ready money. During the years under consideration, the market discount in Berlin was below the Bank rate on an average by 1 per cent or more; at times the difference exceeded 2 per cent. Under such circumstances the officials of the Reichsbank were forced, as soon as the pressing need for an advance was over, to bring its discount rate again into closer agreement with the market discount.

This explains the somewhat variable development of the official discount rate during those years, the great number of changes of discount, and the fact that in 1876. for instance, which in its first days had a discount of 6 per cent, there followed as early as May 18 a reduction to 3½ per cent, whereas the Prussian Bank had never gone below 4 per cent; furthermore, in 1877 and 1878, in spite of stagnation in the spirit of enterprise and the abundance of money on the open market, there were periods with an interest rate of 5 per cent, in 1877 even of 5½ per cent. Finally, when in the first months of 1879 an essential improvement of the gold reserve of the Reichsbank accompanied the decrease of investments and the entire disappearance of uncovered notes, a Bank discount of only 3 per cent could be proclaimed for the first time on March 21, 1879.

Thus this first period of the activity of the German Reichsbank closed with an uncommonly low discount rate, in spite of the difficulties arising from the conditions of the standard.

1879-1883.

Introductory.—The year 1879 is an important turning point in the history of the discount policy of the Reichsbank. The period from 1873 to 1879 was one of economic standstill, and the period of carrying out the coinage reform as planned. From 1879 to 1882–83, the general economic situation again improved. Furthermore, the coinage reform was concluded in 1879, although not in the sense of the Coinage Act of 1873; great losses in silver sales as a result of the continuous depreciation of silver caused the Chancellor to direct the discontinuance of silver sales on

May 18, 1879. The withdrawal of existing silver coins of the various states was also stopped. Of all the coins of the different states in circulation at the beginning of the coinage reform, only the 1-taler pieces were not as yet withdrawn from circulation, and of these there were (in May, 1879), according to an estimate of the president of the Reichsbank, 476,000,000 marks outstanding, partly in circulation and partly in public treasuries.

Economic advance and its influence on the demand for money.—The economic upward movement commencing in the middle of 1879 received its impetus from the United States, where the extension of the network of railways was carried on with particular energy, so that part of the need for materials had to be covered by Europe. From America the spirit of enterprise spread over the whole civilized world. It led to great speculative extravagances and excesses, especially on the Paris Bourse, where at the beginning of 1882 a severe crisis, the well-known Bontoux crash, broke out, which put an end to overspeculation.

In Germany, the impulse given by America was strengthened when Prussia took over the railways. With hopes of a speedy extension of the network of railways, prospects were opened of an increased demand for products of mining industry. The customs tariff was remodeled, from which important German branches of industry entertained hopes of a permanent protection against foreign competition.

In spite of this, the movement in Germany remained within moderate bounds, and was free from the excesses which in other places led to most evil results. The effects of this boom resulted at the Reichsbank in heavier demands on its credit (cf. Tables 55, 62, and 19). The amount of bills put into circulation in Germany, calculated for 1879 at 11,300,000,000 marks, advanced in the following years to 12,000,000,000 marks in 1882, and 12,300,000,000 in 1883. At the same time, the bills handed in at the Reichsbank also increased. The Bank's average investments grew gradually from 397,300,000 marks in 1879 to 441,800,000 marks in 1882, and its average uncovered note circulation increased in the same time from 78,500,000 marks to 152,000,000 marks.

As is seen from these figures, the increase in the claims made on the Reichsbank was not too strong, so that even in those years of favorable economic activity its working funds were not fully claimed. The fluctuations of invested capital increased with its average amount. The difference between the highest and lowest amount of invested capital in 1879 was 161,000,000 marks, as against 237,000,000 marks in 1881. Whereas the Bank had difficulty at certain times in employing its funds, the contingent of uncovered notes was exceeded for the first time at the end of 1881, again at the end of September, and at the end of December 1882.

Concern for upholding the gold standard after the cessation of silver sales.—In addition to the concern as to how these fluctuations of money demand were to be met without allowing the funds of the Bank to lie idle in months of a relatively small strain, the concern for the German standard continued undiminished. On the cessation of silver sales, it had been hoped that the circulation would in a short time absorb the talers still existing;

it became plain, however, that the circulation was still burdened with silver, and continued to discharge silver coins at the Reichsbank. The average silver holdings of the Reichsbank rose from 287,000,000 marks in 1878 to 350,000,000 marks in 1881; at times in the latter year it reached 362,000,000 marks. The gold reserve, on the other hand, which had amounted to 220,000,000 marks on an average in 1879, sank to 207,000,000 marks in 1881. On the most unfavorable return day (October 7, 1881) it dwindled down to 151,500,000 marks. The Reichsbank was defenseless against the exchange of silver for gold which went on at its offices as long as it continued to make payments on demand in imperial gold coins. Before the cessation of silver sales this exchange was counteracted by considerable sums which were taken from the accumulating silver in the Reichsbank to be melted down, and the proceeds were turned over to the Reichsbank in gold But this counteraction was ineffective after the discontinuance of silver sales. The Reichsbank was now dependent upon itself, and a substitute for the gold that was drawn from it by inland circulation or by foreign countries could now be obtained only by influencing international gold movements, through measures of Bank policy, in a direction favorable to Germany.

But to draw gold from abroad was especially difficult just in those years which followed the discontinuance of silver sales. A number of unfavorable circumstances worked together to endanger the supply of gold, not only for Germany but for the whole of Europe.

Gold production showed at that time an essential decline. Whereas it had amounted to nearly 200,000 kilograms on an average in the period 1851–1870, and at least 173,000 kilograms in the following decade 1871–1880, it sank by 1883 to 148,600 kilograms.

To this were added serious disturbances in the previous distribution of gold. The United States, the most important productive country, which had up to that time always yielded gold to Europe in considerable quantities, began not only to retain its whole production of gold for itself, but also to draw large amounts of gold from Europe. This change was caused by the fact that the United States, which at the beginning of the sixties, during the Civil War, had assumed a paper-money basis, resumed specie payments in 1879 after careful preparations; through an exceedingly favorable balance of trade at that time, especially through large exports of grain, it was able to import large sums of gold from Europe. 1880 the United States had an excess of gold imports over exports amounting to \$77,000,000, and in 1881 of \$97,500,000. India also showed at that time an unusual importation of gold from Europe.

The situation was aggravated for gold-standard countries of Europe by the fact that in 1881 Italy also set about to replace with a metallic standard the paper standard existing since 1866. For this purpose a metal loan of 644,000,000 lire was concluded by the Italian government with an international bank association, and of this sum more than 400,000,000 lire were paid in gold. In order to raise such an amount in a comparatively short time, the participating banks were obliged to fall back to a large extent on the gold reserves of European central banks.

All these circumstances had as a result that European gold-standard countries not only had no increase of gold in those years, but suffered large withdrawals. German commercial statistics also show from 1880 to 1884 an exportation of gold in excess of importation. The difficult situation in which the Reichsbank found itself, on account of the continued influx of silver from inland circulation and the corresponding outflow of gold to inland circulation, was considerably aggravated by this export of gold. The greater the amount of silver in its coffers the more its gold basis dwindled and the sharper the measures had to be for combating the outflow of gold to foreign countries.

Advances free of interest on deliveries of gold, and the increase of the purchase price of gold.—Owing to the small demand for money even in this period of economic activity, the measures necessary for maintaining the gold reserve were, just as during the years 1876 to 1879, at variance with the inland money market. Through these conflicting considerations the Bank officials found themselves obliged to seek special measures along with the discount increase in strengthening its gold reserve, and to introduce into its credit system a practice by which the relations with the business world could be maintained, even when there was a great difference between the official Bank discount and the market discount.

In order to take advantage of the economic conditions favorable for the importation of gold, the Reichsbank began in 1879 to grant advances free of interest on deliveries of gold in normal cases for five days, and under special circumstances for eight days. In addition, several branches were permitted to grant for large sums of gold a higher price than the rate fixed in the Bank Act, at 1,392 marks per pound fine, namely, 1,393 marks for amounts of at least 500,000 marks, and 1,393½ marks for amounts of at least 2,000,000 marks.

The Bank naturally suffered a loss in granting the higher purchase price in case the purchased foreign gold coins were not sold again for exportation at advanced prices. Gold in bars and foreign coins may, according to the provisions of the Bank Act, be entered in the balance only at 1,392 marks per pound fine; in coining purchased gold into imperial gold coins the Reichsbank likewise receives only 1,392 marks per pound fine. It was thought, however, that this small loss might be sustained in order to strengthen the gold reserve.

The experiences with these facilities for the import of gold justified the hopes, however, only in a small degree. It became plain that such facilitating terms for the import of gold could have at best only temporary success.

Accordingly, advances free of interest were granted only on the merits of each case, and, indeed, only on deliveries of at least 1,000,000 marks. No case of the purchase of gold at a price higher than 1,392 marks has occurred since 1881.

While the Bank officials endeavored to take every possible advantage of the economic conditions favorable for the purchase of gold, they had never protected their gold reserve by refusing to make gold payments or by setting a premium on gold. It has been necessary under most unfavorable conditions to limit to the imperial main bank in Berlin the withdrawal of gold for the purpose of

exportation abroad; when it became necessary, in consideration of the German standard, to work against an export of gold with high discount rates, it was clearly imperative that the Reichsbank should not facilitate the exportation of gold by bearing the costs of conveyance from Berlin to the points of export, Hamburg or Bremen. On the other hand, the officials of the Reichsbank never thought of refusing to part with gold at the main bank in Berlin or of making the terms prohibitive. The officials have never regarded the gold reserve as an end in itself, but always as a means to an end in maintaining the German gold standard. This maintenance is closely connected with the absolute certainty of receiving from the Reichsbank gold money at its face value on demand. Recognizing this, the Bank officials have never allowed themselves to be turned from their object, even in the most difficult days in the first half of the eighties. They have never misjudged the disadvantages of a high discount rate, yet they have always held fast to the rule that, in the long run, implicit confidence in a stable standard is the first condition for low interest rates.

Introduction of private discount and experiments with a reduced lombard interest rate.—It was difficult to keep in touch with the open money market, on account of the high discount rate frequently necessary for maintaining the standard. The Bank sought in the so-called private discount rate, in addition to the official discount rate (cf. p. 134 ff.), a solution which would not subject the official rate to too many fluctuations.

In times of weak demand for money the Reichsbank felt the competition of private banks of issue to be doubly disagreeable. These sought, without regard to the condition of the standard, to employ their funds as profitably as possible by bidding under the discount rate of the Reichsbank; in doing this they did not hold to their published official discount rate, but at times went considerably below it.

Since section 44, paragraph 1, figure 1, of the Bank Act prescribes that the current rate be published at which banks of issue grant discounts or interest-bearing loans, we might doubt whether the above-mentioned practice of private banks of issue be admissible. After the Bundesrat had decided favorably the Reichsbank likewise began, in January, 1880, to discount bills of a certain kind under its official rate. It has followed this policy ever since, in order to assure itself of a certain stock of first-class paper, even in times of ready money. Discounts below the official rate are stopped when demands for money are high; formerly they stopped whenever the official rate reached 5 per cent, in later years as soon as it reached 4 per cent.

On the other hand, another means in the same direction has not proved useful. It was thought that by a one-sided reduction of the lombard rate the funds of the Bank could be better employed in times of easy money, which, for reasons affecting the standard, did not admit of too low a discount rate (cf. Table 63). Whereas the lombard rate was as a rule kept a full 1 per cent above the discount rate for bills, it was reduced for a short time, in March, 1879, to 4½ per cent, while the bill discount still remained at 4 per cent. In January 1880, with the introduction of private discount, it was decided to fix the lombard interest on time loans for three full months at the bill discount

rate, and on loans for at least six weeks at one-half of 1 per cent above the bill discount. This rule was canceled, however, as early as April 1880 (cf. p. 188, footnote). On the other hand, from August 18 to September 3, 1880, with a bill discount of 5 per cent, the lombard rate was likewise fixed at 5 per cent, and from September 4 to October 5, 1880, the lombard rate was 6 per cent with a bill discount of $5\frac{1}{2}$ per cent. From October 6 the difference was again a full per cent.

The discount rate from 1879 to 1883.—With the growing domestic demand for money and the difficulties of the situation respecting the monetary standard, the discount rates of the Reichsbank rose in general during the period 1879-1883. The average official discount rate rose from 3.70 per cent in 1879 to 4.54 per cent in 1882. sequence of the introduction of private discount, the average profitableness of bill investments, that is, the average interest rate which the Reichsbank actually calculated in discounting bills, was somewhat smaller; even here, however, the advance is unmistakable, from 3.74 per cent in 1879 to 4.43 per cent in 1882. Since the introduction of the private rate, the discount variations were no longer so frequent as in the preceding years. The lowest official discount rate was 3 per cent, at the beginning of this period. This rate had been announced on March 21, 1879, and remained in force until August 13. From now until the end of 1885, the lowest official discount rate was 4 per cent. Discounts at the private rate made it possible to keep in touch with the money market, even in those times in which the difference between the market discount and the official Bank rate was really great. In August 1880, and in February and March, 1881, the Bank lowered its private rate to 2½ per cent. In 1882, which indicated the greatest strain, the lowest rate was, on the contrary, 3¼ per cent. During that time, however, it was frequently necessary to discontinue discounts under the official rate out of regard for the whole situation, and the official rate reached 4½ per cent in 1879, 5½ in 1880, and 6 per cent in 1882 (at the time of the Bontoux crisis, from February 1 to 17). At that time, London had for several weeks a bank discount of 6 per cent, and Brussels even of 9 per cent.

It is characteristic of this whole period, from 1876 to 1882, that the movements of discount rates in no wayas in the later years—corresponded with the natural changes in the domestic demand for money. In most of the later years, the quarter of liveliest demand for money. namely, the last three months of the year, showed the highest discount rates, whereas the first months brought reductions in discount. From 1883 onward it has never happened that a discount reduction was made between August and the end of the year. Discount rates move in certain regular curves, governed by the domestic demand for money. It was otherwise before 1882. All the years from 1877 to 1881 brought reductions in discount in the last months, often as late as the last week of the year, while the highest discount came at very different times, for example, in February for the year 1882. In these years, when the inconveniences of the incomplete coinage reform were still felt, the discount policy of the Reichsbank was dominated more by international gold currents

than by home transactions. This explains the great irregularity of discount movements for that early period.

Altogether, the discount policy of the Reichsbank during those years was attended with success. In spite of the strong international competition for gold and in spite of the active demand for gold by domestic trade, the Reichsbank managed to prevent any material diminution in the amount of its gold reserve. It even succeeded in obtaining a slight increase during the years 1879 and 1880; its gold holdings grew from an average of 207,000,000 marks in 1878 to an average of 226,000,000 marks in 1880; but this increase was lost again in 1881. On the other hand, it succeeded in getting in the last four months of 1882 large amounts of gold by a firm discount policy. In the last quarter of 1882, 93,000,000 marks of gold came to the Bank from abroad, partly in bullion, partly in foreign and German gold coins. At the close of 1882 the Reichsbank had a gold reserve of 245,000,000 marks against 180,000,000 marks at the close of the previous year. The favorable development continued into the first months of 1883, so that the Reichsbank's stock of gold on March 15, 1883, reached 311,000,000 marks, as against 220,000,000 marks on March 15, 1882. The Reichsbank had not had so large a gold reserve since the middle of 1876. The time of greatest distress was now over for the Reichsbank.

1883-1888.

Economic depression.—The general economic upward movement, which had lasted since 1879, reached its climax in 1882. In 1883 the decline began to set in.

The construction of railways, which since 1879 had been carried on in various states with great activity, came everywhere to a standstill. The products of mining industry did not have a sufficient sale, and prices sank. The unfavorable development was communicated to the most important branches of manufacturing industry. Business stagnation seemed to reach its lowest point in 1885. Political apprehensions arising from the friction between England and Russia on the Indian frontier and in Afghanistan accentuated general apathy, and added to the general uncertainty. At last, toward the end of 1886, a partial increase of trade set in, from which much was hoped in many quarters. The stimulus proceeded again from the United States, but the improvement was only of short duration, at least on the Continent, where political complications produced anew an uncertainty which checked the spirit of enterprise. The Bulgarian disturbances, the resulting opposition to Russia, and incidents on the French frontier made war seem In November 1887, the Chancellor issued an order to the Reichsbank prohibiting advances on Russian securities.^a Only in 1888 did men's minds become quieter, permitting a vigorous economic advance. In spite of the unfavorable political situation, a distinct improvement was recognizable in Germany from the end of 1886, as compared with the stagnation of 1884 and 1885.

Development of the status of the Reichsbank.—With the decline of prices and the disappearance of the spirit of enterprise, the money demand in Germany decreased very much as was expected. The amount of bills

The prohibition was rescinded in 1894.

drawn in Germany decreased slowly from 12,300,000,000 marks in 1883 to 11,800,000,000 marks in 1886; then came a slight increase with the slight improvement of economic conditions, but even in 1888 with 12,200,000,000 marks the amount still fell somewhat short of 1883. The variations in these figures are not great, and it is in keeping with this that the average bill holdings of the Reichsbank suffered from 1883 to 1886 no changes worthy of mention; the years 1887 and 1888 show again a considerable increase in investments.

On the other hand, the development of transfers effected a great increase in the funds of the Reichsbank through large deposits during the years of business standstill. The average amount of transfer balances rose from 135,000,000 marks in 1882 to 260,000,000 marks in 1887; it thus doubled in the short period of five years. The total deposits at the Reichsbank rose in the same time from 172,000,000 to 352,000,000 marks, an increase of 180,000,000 marks.

The establishment of clearing houses (cf. p. 115ff.) in 1883 made superfluous the employment of cash for a considerable number of transactions, and this helped its accumulation in the coffers of the Reichsbank.

A marked improvement of the German gold balance also occurred. From 1885 onward German commercial statistics show continuously an excess of gold imports over exports, and the gold purchases of the Reichsbank from 1885 to 1888 reached sums that were really enormous; they amounted altogether in these four years to 668,000,000 marks. The average gold reserve of the

a Inclusive of the transfers in transit (cf. Table 38).

Reichsbank increased from 209,000,000 in 1882 to 608,000,000 marks in 1888, and the average stock of metal rose in the same time from 549,000,000 to 903,000,000 marks.

With this increase of cash holdings, together with a simultaneous increase of deposits which did not correspond to an increase of investments, the uncovered note circulation dwindled considerably. It diminished from an average of 152,000,000 marks in 1882 to an average of 55,000,000 marks in 1887; in 1888 the cash holdings even exceeded the note circulation on an average by some 1,000,000 marks.

It was of great importance in this development that the increase of the metal holdings of the Reichsbank consisted only of gold. That was self evident as far as imports from abroad went; but also the home country, which up to 1881 had sent silver in considerable quantities to the Reichsbank in exchange for gold, now began to get silver from the Bank and to give up gold for it. great exchange of silver for gold, which was carried on at the offices of the Reichsbank in consequence of the coinage reform, had come to an end in 1882. In 1881 the average silver holdings of the Reichsbank had attained their highest figure with 350,000,000 marks. Circulation had manifestly given up all superfluous silver to the Bank. Every increased demand for silver money, such as necessarily occurred with the growth of population and the increase of small transactions, could now be satisfied only by the withdrawal of silver from the Bank. 1882 showed an average stock of silver of only 340,000,000 marks, a decrease of 10,000,000 marks against the preceding year. In 1887 the average silver holdings amounted to only 301,000,000 marks, in 1888 to only 295,000,000 marks, while the gold reserve increased greatly as already described. The composition of the metal holdings of the Reichsbank was exactly reversed in those years. In 1881, gold represented on an average 37.2 per cent of the metal reserve; in 1882, 38.1 per cent; in 1887, on the contrary, 61 per cent, and in 1888, 67.3 per cent.

Movement of discount rates.—The position of the Reichsbank was greatly strengthened in that period. The great concern about a sufficient stock of gold, which had previously dominated the Bank's policy, disappeared; the increase in metal holdings, especially in gold reserve, and the cessation of the strong demand for credit, enabled the Bank to maintain a low rate of interest during those years. Its average official discount rate, which had amounted to 4.54 per cent in 1882, sank to 3.28 per cent in 1886; the average profitableness of its bill investments sank from 4.43 per cent in 1882 to 2.76 per cent in 1886, and 2.78 in 1888. Credit in lombard loans was made cheaper, since the interest rate for advances on imperial and federal state bonds had been fixed since February, 1884, at one-half of I per cent above the discount rate, while for other admissible paper the rate of 1 per cent above the bill discount was maintained. Owing to this abundance of floating capital it seemed proper to promote lombard loans on thoroughly safe and marketable securities; on the other hand, the preferential rate was expected to induce thrifty Germans to invest their capital in German imperial and state securities.

When we regard in detail the changes in the position of the Reichsbank from 1883 to 1888, we observe that even during that period of economic standstill the fluctuations in money demands on the Reichsbank again increased to a considerable degree. The difference between the lowest and the highest amount of investments was in 1886, 329,000,000 marks. quently in spite of the average material improvement the most unfavorable return days in various years showed a decided strain and brought issues in excess of the note contingent. The tax limit was exceeded at the end of 1884 by 32,700,000 marks, and at the end of 1886 by 34,200,000 marks. These strains were counteracted by lengthy periods in which cash holdings exceeded, at times quite considerably, the whole note circulation, as, for instance, during the first months of 1886 and on thirteen return days during 1887; no less than twenty-eight of the forty-eight return days in 1888 showed a cover in excess of note issue, and this cash excess cover reached 170,600,000 marks on June 7, 1888.

The movements of discount rates were influenced in various years by these great fluctuations; in general, however, the interest rates of the Reichsbank during this period showed great stability. From January 18, 1883, to March 10, 1885—a period of nearly twenty-six months—the official discount rate was uninterruptedly at 4 per cent. From February 20 until October 18, 1886, and from May 11, 1887, into September 1888, the official rate was only 3 per cent. In 1884 and 1885 the Bank often lowered its private rate, however, as low as 3 per cent, and in 1886 to 1888 frequently as low as

2 per cent. Money on the open market was at times so abundant that in February 1886, for instance, the market discount in Berlin declined to 1½ per cent. On the other hand, the official discount rate during these years had to be raised twice up to 5 per cent, first, in March 1885, on account of the Anglo-Russian complications and a resulting outflow of gold to England, then in December 1886, on account of an enormous increase of Reichsbank investments, which were attributable partly to an improvement in business and partly to the money demands of the international market for armaments—at that time being feverishly planned by most of the great powers. These were, however, only short breaks in the prevailing abundance of money.

1888-1890.

General economic situation.—The year 1887 had brought a decided renewal of economic activity in England and in the United States. In Germany, the improvement of conditions was first felt in 1888, after the political apprehensions of the previous years had been dissipated. The upward movement developed rapidly, and was communicated to the whole of Europe. The lively demand for commodities of all kinds and rising prices led everywhere to business expansion. A large number of industrial undertakings were converted during that time into joint stock companies on a broad basis, and the formation of new companies of this kind assumed uncommon proportions. The activity in new companies in 1889 surpassed in Germany that of all years since 1873. The number of new joint stock companies rose from 70 in 1885 to

184 in 1888, and 360 in 1889. The capital of these companies amounted in 1885 to 53,500,000 marks, in 1888 to 193,700,000 marks, and in 1889 to 402,500,000 marks. The extension and reorganization of so many manufactories increased the demand for coal and iron. Numerous government orders for railways and for war material worked in the same direction. The prices for mining products experienced extraordinary advances, and mining industry showed splendid business profits. Only the numerous significant workingmen's strikes of that time had a certain hampering effect.

All kinds of speculative extravagances were connected with this upward movement—excessive extension of business and particularly overvaluation of industrial securities. The great profits of mining brought about speculation in mining securities. Speculation spread to all classes, and the market prices of securities bearing variable dividends experienced advances far beyond justifiable bounds.

The extravagances of speculation were aided by the low interest rate in the preceding period. The conversion of numerous interest-bearing securities which decreased the income, disposed the public toward taking industrial securities which held out prospects of high dividends. These conditions increased the demand for exotic paper of all kinds. The fever of speculation spread to various countries over the sea. European capital was invested in Argentina to a particularly large extent; the Argentinian crisis in 1890 wrought great devastation in Europe, and added materially to the recoil of overspeculation.

Increasing money demand and the Reichsbank.—Both the upward movement in Germany toward the end of 1888, and the collapse of speculation in 1890, were accompanied by a considerable increase of claims on the money market. The amount of bills drawn in Germany rose from 12,100,000,000 marks in 1887 to 13,200,000,000 marks in 1889, and 14,000,000,000 marks in 1890.

Owing to this increase in money demand, the money market was obliged to fall back on the Reichsbank again. The average investments of the Reichsbank rose from 524,000,000 marks in 1887 to 637,000,000 marks in 1890. As always in times of active business, the fluctuations of investments show again a considerable increase. The difference between the lowest and highest sum of investments amounted in 1888 to 199,000,000 marks, as against 407,000,000 marks in 1889.

The increase of claims on the Reichsbank was not counterbalanced by any increase in its working capital With the development of transfers, the dehowever. posits on transfer accounts had increased from 172,000,000 marks in 1882 to 382,000,000 marks in 1888. Stagnation The year 1890 showed holdings followed. 361,000,000 marks in deposits—20,000,000 marks less than Thus working capital suffered a slight decrease in 1888. in a period of an economic increase of claims. At the same time, however, it must be noticed that from 1888 to 1890 transfer transactions increased from 64,000,000,000 to 80,000,000,000 marks in spite of the decrease of balances on transfer accounts, and that consequently the smaller

balances performed greater services in payment operations as a result of more extensive utilization.

Even the gold influx from abroad did not counteract the increasing demands on the central bank at this It is true that the gold purchases of the Reichsbank reached the enormous sum of 236,000,000 marks in 1888, but during the last months of the year they stopped; indeed, there even occurred an outflow of gold, which went mainly via England to Argentina. Reichsbank could buy only 12,000,000 marks of gold during the whole of 1889. Just at that time the money demand was also active abroad; the world's exposition in Paris drew large sums of gold to France. During the first three-quarters of 1890 the influx of gold was small. Toward the end of the third quarter, Russia withdrew considerable sums in gold specie from its balance in Berlin. The last months of 1890 brought again a stronger importation of gold. It is a natural phenomenon in international economic expansion that the increased demand for money scarcely allows the acquisition of large amounts of gold by any single country. It was all the more important that the Reichsbank had materially strengthened its stock of gold from 1885 to 1888.

The claims of domestic trade in conjunction with the unfavorable balance of gold effected a considerable diminution of the gold holdings of the Reichsbank. They sank from an average of 608,000,000 marks in 1888 to an average of 519,000,000 marks in 1890. They had reached the highest point on June 23, 1888, with 702,000,000 marks, and the lowest point on October 7, 1890, with only 412,000,000 marks.

The Bank's stock of silver also diminished from an average of 295,000,000 marks in 1888 to 282,000,000 marks in 1890.

In contrast to the fluctuation in cash holdings, the note issue experienced a considerable increase. increase had begun in 1886; from an average of 727,000,000 marks in 1885, the average note circulation of the Reichsbank rose to 987,000,000 marks in 1889, and reached 984,000,000 marks in 1890. Up to #888, this advance had not only been counterbalanced by the increase of metal holdings but had been surpassed, so that the greater part of this year showed a strong cover in excess of the note circulation. The first half of 1889 showed cover in excess of notes sixteen times; in the second half, on the contrary, the contingent was exceeded three times, the greatest at the close of the year, with 109,500,000 marks. The year 1890 exhibited no cover in excess of notes, but six excesses of the contingent. average uncovered note circulation, which had disappeared in 1880, amounted again in 1889 to 86,000,000 and in 1890 to 152,000,000 marks.

Movement of discount rates.—The Bank had to counteract heavy demands on its funds by frequent and sharp increases in discount at this time. Its average discount rate, which in 1888 was only 3.32 per cent, was, in the two following years, 3.68 per cent and 4.52 per cent. From September 1889, it was obliged frequently to suspend it discounts at the private rate. The average profitableness or its bill investments rose in the three years 1888–1890 from 2.78 to 3.19 and 4.35 per cent.

Corresponding with the great fluctuations of invested funds and of uncovered notes, the discount rate underwent numerous changes during these years. In 1888 the Reichsbank kept the official rate of 3 per cent until the middle of September, and frequently reduced its private rate to 2 per cent. Then the outflow of gold to Argentina necessitated advances to 4 per cent and in December to 41/2 per cent. When the new year brought a strong influx and the free circulation of money on the open market was restored, the official discount rate was again reduced to 3 per cent on February 4, 1889. Until July the private rate of the Reichsbank was frequently only 2 per cent. result of the growing domestic demand for money, however, the investments of the Reichsbank so increased in that time, that, at the end of August, they exceeded the investments at the corresponding period of the previous year by 200,000,000 marks, with cash holdings smaller by 100,000,000 marks. At the beginning of September, therefore, discount was advanced to 4 per cent, and when the last September report showed an aggravation of the strain and an excess of the contingent by 72,000,000 marks, the rate was advanced to 5 per cent. Discounts at the private rate were suspended. The unusual strain continued during the last quarter; indeed, it was enhanced. close of the year showed funds to the extent of 868,000,000 marks, and a contingent exceeded by 109,500,000 marks. The extraordinary amount of lombard investments was particularly striking, but characteristic of the whole situation. It surpassed all previous records at the high figure of 186,000,000 marks. This circumstance showed to what extent ready money was at that time tied up.

The scarcity of money on the open market appeared in the fact that in the last quarter of 1889 the market discount always remained close to the Bank discount—in November and December it at times reached the Bank discount. The Bank was thus urged to follow the example of the Bank of England, which in the last days of the year had raised its discount rate to 6 per cent, although the London discount was lower than Berlin. The officials of the Reichsbank believed, however, that, with the relief to be expected in the first weeks of the new year, they would be able to spare the business world such an unusual increase of its interest rate.

The reflux after the turn of the year, however, did not come up to expectations. The sustained demand for money held with uncommon tenacity the funds given out by the Reichsbank. The period of prosperity was at its height; prices of industrial raw materials maintained their high level—indeed, they rose higher; the formation of joint stock companies was continued with undiminished vigor.

The Reichsbank did not lower its discount to 4 per cent until February 22. Its discounts at the private rate, which it recommenced, had to be suspended again as early as March 8, owing to the height of the Bourse discount.

Indications of a decline in economic activity gradually set in. Foreign countries started with a reduction of prices and competed sharply with German productions, particularly in mining industry. Reductions in prices in rapid succession from March onward were followed by the collapse of speculation in industrial stocks.

But this brought about no lasting relief for the money market. Those houses which formerly placed large sums of money at the disposal of trade found themselves obliged to proceed with caution, in order to avoid being left with many securities which could be disposed of only at a great loss. Before a real improvement could take place a combination of circumstances gave the situation an extraordinary turn.

First of all, at the end of September, Russia withdrew from Germany at one stroke 40,000,000 marks in gold, and caused a perceptible weakening of the Reichsbank's gold holdings, already greatly diminished.

Then a revolution broke out in Argentina, which overthrew the government there, bankrupted Argentinian finances, and brought about an economic collapse. European houses, especially those of England, which had been interested in Argentinian enterprises, felt the effect keenly, and the large London house of Baring Brothers had to suspend payments in November. The English financial world stood on the verge of a precipice, the Bank of England, which had already raised its rate to 6 per cent, could tide over the dangers only by means of gold loans from the Bank of France and from the Russian ministry of finance.

Simultaneously there occurred in the United States a collapse of overspeculation promoted by the protective McKinley bill, and of the silver boom started by the Sherman bill.

The Reichsbank had raised its discount to 5 per cent on September 26, and to 5½ per cent on October 11,

in consequence of Russian withdrawals of gold, and now was forced, in view of the international situation, to retain this rate beyond the close of the year, although its own position had improved in the last months of 1890, and its gold holdings had increased by more than 70,000,000 marks from October 7 to December 31 by influx from abroad. The market discount also remained high, and at 5½ per cent in the middle of December reached temporarily the highest point of the bank rate.

1891-1895.

Economic depression and its causes.—The severe crises of 1890 ushered in a period of economic standstill all over the world, and this standstill, with a short break in 1893, extended into 1895.

The crisis in Argentina and the political fermentation and civil war in Brazil, Chile, and other South and Central American states were detrimental to the purchasing power of countries over the sea. In addition to this. commerce with silver-standard countries, especially those in Asia, was impeded by the sharp fall in the price of silver after the failure of speculation in connection with the Sherman bill, the cessation of Indian silver coinage. and the suspension of American silver purchases in 1893. The difficulties for foreign sales were considerably increased by prohibitive measures introduced at that time into the tariffs of many countries. The highly protective McKinley bill had just gone into force in the United Russia, Roumania, France, Spain, Portugal, and Switzerland also raised their customs duties. In 1893 a tariff war began between Russia and Germany.

The difficulty in foreign sales depressed business activity all the more in that the home purchasing power decreased. German national wealth had suffered great losses in industrial securities and exotic stocks. Not only the crises in South America had to be taken into account, but, above all, financial maladministrations in Portugal and Greece, by which numerous German holders of bonds in these countries suffered heavy losses.

The power of absorption of the German domestic market suffered especially through the bad harvest of 1891. This diminished the purchasing power not only of the agricultural classes, but also of the working population. Since Russia also had a great failure of crops and issued a prohibition against the export of grain, the prices of the most necessary provisions became extraordinarily high, and forced the great masses to limit their demand for all but the most indispensable commodities.

To this were added two catastrophes of international importance—in the spring of 1893 a severe crisis in Australia, which reacted strongly on England and therefore on the world's market, and in the second half of 1893 the crash evoked by the unsuccessful policy with respect to the standard in the United States, which damaged the American national economic system and brought material losses to holders of American securities, especially of American railway bonds.

The unusual difficulties in disposing of wares, together with excessive production from 1888 to 1890, led to a sharp decline in the prices of most commodities. This decline was temporarily interrupted by an advance in the prices of provisions in 1891 and of prices in the

textile industry, especially of cotton and silk, in 1893. The spirit of enterprise was prostrate. Whereas 360 joint stock companies with a capital of 402,500,000 marks were formed in Germany in 1889, only 95 were formed in 1893, and 92 in 1894, with a capital of 77,000,000 and 88,000,000 marks, respectively.

Development of the money market.—Nevertheless, the fact that the number of bills drawn in Germany during the year 1891 increased as compared with the previous year (from 14,000,000,000 to 14,600,000,000 marks) and maintained nearly the same level, with slight fluctuations in the following years, shows that it was only a stagnation and not a decided decline in the development of the German national economic system.

Nevertheless, money became abundant soon after the beginning of 1891. Capitalists were cautious in dealing with exotic stocks and industrial securities, and sought investment in safe loans bearing low interest. The banks, after getting rid of the paper which had remained on their hands at the collapse of speculation, placed their funds mainly at the disposal of the money market and thereby effected an essential decrease in discount rates.

The abundance of money was increased by the production of gold, which assumed large proportions from about the beginning of 1890. The production of gold rose from 500,000,000 marks in 1890 to 840,000,000 marks in 1895. At the same time the movement of gold became uncommonly favorable for Europe. An uninterrupted flow of gold from the United States took place. This was caused partly by large silver purchases

of the American treasury and the issue of silver certificates which drove gold out of circulation, and partly by the growing mistrust in the American standard, which led to a large return of American securities. The excess of gold exports over imports in the United States amounted in 1891 to \$68,000,000, in 1893 to \$87,000,000.

In consequence of these conditions gold gathered in European central banks as never before.

There were also some counteracting forces, above all in the endeavors of Russia and Austria-Hungary to prepare for the introduction of the gold standard. These two states sought, especially in 1893, to attract large amounts of gold, and in doing this depended on the great central bank lying nearest to them, the German Reichsbank. In the same year Italy, which had a tariff war with France and whose securities were systematically thrown on the market by France, made great claims on German markets, which for political reasons took up the securities rejected by France.

All this, however, could interrupt only for a short time the great abundance of gold in that period. In 1894 the average Berlin market discount was only 1.74 per cent, and in the first months of 1895 it fell to 11/8 per cent.

The condition of the Reichsbank.—The economic standstill was shown at the Reichsbank, first of all in the discontinuance of the increase in investments since 1886. Only the year 1893, as a result of special conditions, showed a considerable increase of investments; in 1894, they were again several million marks below the average of 1891 and 1892. In 1892, for the first time since 1882,

occurred a decrease in transfer transactions and in clearing house transactions.

On the other hand, transfer accounts and other deposits, the growth of which had come to a stop in 1888, with a simultaneous increase of transfer transactions, now also showed a new gain. The average deposits rose from 361,500,000 marks in 1890 to 511,900,000 marks in 1892; the year 1893 brought a considerable decrease, which was followed in the next two years by another increase.

The gold reserve of the Reichsbank however underwent the greatest change. The Bank's gold purchases during the four years 1891 to 1894 amounted altogether to 616,000,000 marks. After the average stock of gold had sunk in 1890 to 519,000,000 marks, it surpassed in 1892 by 616,000,000 marks its highest previous average (in 1888), and, after a temporary decline in 1893, rose to an average of 705,000,000 marks in 1895. The gold reserve of the Reichsbank was largest on February 7, 1895, with 799,600,000 marks.

This increase of the gold reserve might have been greater if there had not been a considerable increase, the first since 1881, in the silver holdings of the Reichsbank from 1890 onward. These rose from an average of 282,000,000 marks in 1890 to an average of 326,000,000 in 1892, an increase of 44,000,000 marks in two years. In this connection, we must remember that an agreement was made in February 1892, between the German Empire and Austria-Hungary, according to which the latter took over 26,000,000 marks in Austrian talers from Germany in three yearly installments, the first of

which, to the amount of 8½ million marks, was delivered to Austria on April 1, 1892. The Austrian talers were taken out of the reserve of the Reichsbank. Without this withdrawal, the increase from 1890 to 1892 of the Reichsbank's silver reserve would have been more than 50,000,000 marks.

A diminution began in 1893. The average silver holdings in 1894 were 315,000,000 marks; the decrease as compared with 1892 was 12,000,000 marks, while the Austrian talers amounted to 17,500,000 marks. In those years, therefore, a little silver still came from free circulation.

The causes of this striking increase of silver holdings may have been the decrease in the demand for metallic money during these years, the lowering of wages, and similar conditions. Another cause lay partially in the fact that in 1888 and 1890–91, for the first time since 1881, large amounts of crowns were coined, more than 50,000,000 marks in all, and these crowns made superfluous the corresponding sum of silver money in free circulation.

The increase of silver holdings, which at the end of the seventies and the beginning of the eighties had threatened the maintenance of gold payments, was of no consequence, however, at the beginning of the nineties, on account of the strong increase of gold reserve. It could not injure the situation of the Bank, and was without influence on the Bank's policy.

In spite of large deliveries of gold, the notes of the Reichsbank did not increase materially during the years 1890 and 1894. They increased from an average of 984,000,000 marks in 1890 to 1,000,000,000 marks in

1894; the year 1895 first showed a material increase, with 1,095,000,000 marks, which, however, was attributable also to the change in economic conditions in the second half of this year. The uncovered notes dwindled greatly, owing to the considerable increase of the cash holdings. They amounted to 8,700,000 on an average in 1892, and 30,600,000 in 1894. The cash reserve often exceeded the note circulation, particularly in 1892 and 1894–95. On February 23, 1895, the cover in excess of notes reached its highest point, with 177,800,000 marks.

Movement of discount rates.—The Bank was placed in a position to reduce its interest rate considerably by this turn of events. The average official discount rate receded from 4.52 per cent in 1890 to 3.12 per cent in 1894 and 3.14 per cent in 1895; the average profitableness of bill investments sank in the same years from 4.35 per cent to 2.85 per cent and 2.66 per cent. Bank lowered its private rate to 2 per cent for lengthy periods in all years from 1892 to 1895. A discount of 5 per cent was reached only in the year 1893, in which active business operations in various manufactures increased the inland demand for money, while great claims were made simultaneously on the German market by Russia, Austria, and Italy, and the whole international money market was strongly affected by the Australian and North American crises. From February 5, 1894, until November 1895, the official discount rate was uninterruptedly at 3 per cent. The Bank discounted under its rate mostly at 2 per cent, until a complete change of all conditions occurred in the second half of 1895, and a brilliant new

development of German economic activity began. A new period for the discount policy of the Reichsbank likewise began.

1895-1900.

Economic advance.—In the introduction to this chapter, the great advance of economic activity in Germany in the course of the last quarter of a century was characterized with a few figures. The main development occurred in the quinquennial period from 1895 to 1900, which stands alone in the history of German activity. Never before had Germany experienced an economic improvement of the strength and duration of the last five years.

Whereas in other favorable economic turns of the last quarter of a century the impulse came mostly from abroad—in 1879 from America, in 1888 from America and England—the latest upward movement appeared first in Germany and gradually spread from there over the whole of the civilized world.

The impetus was given by the development of electrical industry (*Electrotechnik*), the scientific study and practical utilization of which has been advanced most in Germany. Electricity has been rapidly and greatly developed as a motor force in industries, electric tramways, and in the electric light; it has been constantly employed in machine industry, and has increased greatly the demand for coal, iron, and other metals. Then came the extension of railways, and the increase of rolling stock in Germany and other countries, the building of great new lines of railway in distant parts

of the world, and, furthermore, the increase of navies by all great powers. The demand for the products of mining raised prices, and led to an enormous expansion of business. The price of raw iron rose since 1895 from about 50 marks per ton to 90.7 marks per ton in 1900. The production increased from 5,000,000 tons to more than 8,000,000 tons. The price and production developed similarly in the case of coal and other products of the coal and iron industries.

The good state of business in this national industry was communicated gradually to the whole national economic system. The purchasing power of large classes of population was considerably increased. The urgent need for workers raised the standard of wages, and thus led to a great advance in the purchasing power of the masses.

The brilliant development of our foreign sales commencing with 1895 worked in the same direction as the increasing purchasing power of the domestic market. After the tariff war with Russia, after German export industry had overcome the disturbances of protectionist measures which had been carried into effect in numerous countries at the beginning of the nineties, and after our foreign trade had been guaranteed a sure foundation for a number of years in commercial treaties, German exports assumed proportions exceeding all expectations. They increased from 3,051,500,000 marks in 1894 to 4,555,000,000 marks in 1900, that is, by 50 per cent in five years.

The great opportunity for disposal of goods at home and abroad roused the spirit of enterprise, and led to enormous extensions of existing businesses and the formation of new ones.^a As already mentioned, 92 joint stock com-

a The following figures are taken from the "Deutscher Oekonomist."

panies with a capital of 88,000,000 marks were established in Germany in 1894. The following years brought so great an increase that, in 1899, the number of new companies amounted to 364, with a capital of 544,000,000 marks. The issue of industrial shares (by the formation of new companies and by the increased capital of existing ones) is estimated according to market value at 79,000,000 marks for 1894 and 861,000,000 marks for 1899.

The whole activity in Germany has experienced a similar development. From 1895 to 1899 the emission of home securities rose from 1,057,000,000 to 2,378,000,000 marks in market value, and the emission of home and foreign securities from 1,375,000,000 to 2,611,000,000 marks.

Not till 1900 did the unusual advance of German national economic activity come to a halt. Signs of over-production appeared in the most important branches of industry, and a violent reaction of the inflated prices of mining and industrial stocks followed on the bourses. The spirit of enterprise weakened considerably. The activity during 1900 in floating and issuing was far less than in 1899. The number of joint stock companies sank to 261 with a capital of 340,000,000 marks; the total issue of industrial shares amounted, according to the market value, to only 461,000,000 marks, or 400,000,000 marks less than in 1899. The total emission of home securities, with a market value of 1,576,000,000 marks, fell short of 1899 by 800,000,000 marks. The market value of the emission of home and foreign securities amounted to 1,851,000,000

marks, as against 2,611,000,000 in the year 1899. Yet the figures for 1900 are favorable in comparison with former years.

Altogether, the market value of the securities placed on the German market in the six years, 1895–1900, exceeded 12,000,000,000 marks.

The development of the money market.—These extraordinary investments of capital produced a stringency on the capital market and raised the interest rates. The decline in market prices of bonds and mortgage bonds bearing fixed interest and the advance in mortgage interest rates during recent years were necessary effects of the increased profits and of the increase of capital tied up in industrial and commercial undertakings.

The interest rate for short credit, which in general is more variable than the interest rate for investments, increased most. The increase of transactions and of prices, all financial operations which are necessary to the floating of new undertakings and the extensions of existing ones, would necessarily increase the need for working capital and the demand for short credit. Consequently the bills put in circulation increased from 14,700,000,000 marks in 1894 to 23,300,000,000 marks in 1900.

It is true that against the increased demand for means of exchange in most civilized countries, just as in Germany, there was an extraordinary increase in the production of gold. The amount of gold obtained increased from 840,000,000 marks in 1895 to 1,300,000,000 marks in 1899, in spite of the fact that the war in the Transvaal crippled the output of gold in the leading produc-

tive country. A considerable extension of the gold standard and of the use of gold, however, went hand in hand with this large increase of the yellow metal for coinage purposes. Russia and Japan formally introduced the gold standard. Austria-Hungary had taken large sums of gold for the purpose of introducing the gold standard. India had taken steps in the same direction, and finally the United States, before it formally proclaimed the gold standard as the basis of the American monetary system in March 1900, had for years not only kept for itself the proceeds of its gold mining, but had, by means of its extraordinary favorable balance of trade, imported gold from Europe.

Apart also from political measures affecting the standard, several events contributed to the increase of the demand for money abroad, and through this indirectly aggravated the strain on the German money market. This is especially true of the Spanish-American War and of the Boer War, both of which entailed a great expenditure by the countries concerned. Not only England, but also the United States, have at times placed large sums at the disposal of the German money market. The demand for money at home caused them partly to withdraw their balances. Thus England, especially, called in large amounts from Germany after the beginning of the Transvaal war. Whereas the gold traffic between England and Germany was in favor of Germany, a turn set in toward the end of 1899.

In spite of all these adverse circumstances Germany succeeded in securing a respectable portion of the newly gained gold. Gold imports did not attain the same

proportions as in the years 1891 to 1894. Each year, however, showed finally an excess of gold imports over exports, which increased uninterruptedly from 15,200,000 marks in 1895 to 135,000,000 marks in 1899, and 127,000,000 marks in 1900. The gold purchases of the Reichsbank amounted altogether, from 1895 to 1900, to 566,000,000 marks.

The condition of the Reichsbank.—The German demand for money increased so much, however, that this importation of gold, although considerable, could not completely satisfy it. The result was a considerable increase in the calls on the Reichsbank, from whose large cash holdings a great demand for specie was satisfied and which was able to meet the ever-growing need for-currency only by increasing its issue of uncovered notes.

Under these conditions the investments of the Reichsbank greatly increased. They increased from an average of 635,000,000 marks in 1894 to 909,000,000 marks in 1899. At the same time the fluctuations in the calls on the Reichsbank again increased materially. The difference between the highest and the lowest condition of investments was 175,000,000 marks in 1894. investments ranged between 635,000,000 the 1,251,000,000 marks. The difference between maximum and minimum, therefore, reached the high figure of 616.000.000 marks. As a result the investments show a much greater increase on the days of greatest stress, for which the Reichsbank must be prepared, than in yearly averages. The highest figure for 1894 was 737,500,000 marks, and for 1900 1,319,300,000 marks.

This extraordinary growth of investments was again offset, as in former periods of a rising demand for money. by the fact that the moneys from transfer transactions and the other deposits received by the Reichsbank did not increase correspondingly. Deposits attained an average of 499,500,000 marks in 1895, against 361,500,000 marks in 1890. A decline occurred in the following years to 471,400,000 and 474,700,000 marks in 1897 and 1898. The year 1899 at last showed a respectable increase to 524,700,000 marks, which was again followed by a decrease to 512,700,000 marks in 1900. Transfer transactions during that time, on the contrary, show an uninterrupted and important increase. The account holders, because of the strong demand for money and the high rate of interest, endeavored to keep their balances as low as possible and to make the most use of them.

The great increase of investments without simultaneous increase of deposits could take place only through an expansion of note circulation and a decrease of the cash reserve of the Bank.

As a matter of fact the cash reserve diminished greatly. It sank from an average of 1,045,000,000 marks in 1895 to 854,000,000 marks in 1900. It reached its highest point on February 15, 1895, with 1,148,000,000 marks, and its lowest point on September 30, 1899, with 718,000,000 marks.

The gold and silver holdings were affected by the decline in the same way. The average stock of gold sank in the period named from 704,600,000 to 570,700,000 marks—that is, by 133,900,000 marks. The average silver reserve diminished from 307,200,000 to 246,400,000—that is, by

about 60,800,000 marks. The decrease of gold reserve amounted to 19 per cent and of silver reserve to 19.8 per cent. The decrease was therefore of nearly equal strength in both parts of the metal reserve. As silver can be employed only for home payments, it is seen (as also from the figures of commercial statistics) that the decrease of gold reserve was not caused by an outflow of gold to foreign countries but by withdrawals by domestic trade.

The lowest state of gold reserve was 450,300,000 marks, on September 30, 1899, the highest 799,600,000 marks, on February 15, 1895.

An important increase of note circulation went on simultaneously with the decrease of metal reserve. The average issue of notes rose from 1,000,400,000 marks in 1894 to 1,095,600,000 in 1895, receded in the following year to 1,083,500,000, and then advanced uninterruptedly to 1,141,800,000 in 1899 and 1,138,600,000 marks in 1900.

The average uncovered note issue shows a continuous increase from 30,600,000 marks in 1894 to 284,700,000 marks in 1900. The average metal cover for notes sank in the same time from 93.4 to 71.8 per cent, and the average metal cover of notes and deposits amounted to only 49.5 per cent in 1900. These figures represent the most unfavorable condition of the Reichsbank since its establishment.

With great fluctuations in the whole status of the Reichsbank, the days of greatest stress showed a larger note circulation and a more unfavorable proportion of cover. Whereas 1895 showed cover in excess of note circulation on twenty return days, it showed issues in excess of

the contingent on September 30, October 7, and December 31. The following three years showed an excess cover, which fell regularly on February 23, but they showed also excesses of the note contingent at the end of each quarter. The year 1898 showed sixteen excesses of note contingent, the greatest, with 283,000,000 marks at the close of the year. The year 1899 showed twenty excesses of note contingent. The tax limit was exceeded during the whole of the last quarter of the year; the largest excess amounted to 371,000,000 marks on September 30. The metal cover for notes amounted on September 30, 1899, to only 49.7 per cent; for the first time since the establishment of the Reichsbank less than half the notes were covered by metal. The metal cover for all demand liabilities sank on the same day to 36.8 per cent. The year 1900 also showed twenty excesses of the note contingent, the largest, with 356,000,000 marks, at the year's close. The most unfavorable cover of notes was 51.8 per cent, and that of all demand liabilities 38.3 per cent-somewhat higher than in the preceding year.

The Bank policy.—The unusual development of all conditions confronted the Reichsbank with the most difficult tasks in its discount policy. Never since its establishment had the concern for the maintenance of sufficient cover for its obligations been in so strong a conflict with the claims for credit on the Reichsbank. With the concern for the unconditional preservation of its own solvency and for the safety of the German standard, there arose for the Bank the task of counteracting the danger of excesses connected with each favorable turn of economic condi-

tions; and in this it was just as important to prevent as far as possible too great an expansion of production as well as over-speculation and an overstraining of credit. The expansion of production, the prices of commodities and industrial securities, and the demand for credit had to be kept within reasonable limits if the brilliant development of economic forces was not to end in a fatal collapse, as often happened in slighter upward movements.

During a great increase of business and of demands for money and capital economic activity produces a certain counteraction against excesses in the rise of the interest Each advance of the price of credit means a limitation of the demand for credit, a check on too strong an expansion of production and on the extravagances of speculation. A central bank would quite mistake its tasks if it counteracted this tendency to a raising of the interest rate, which is so beneficial for the whole situation. the individual, cheap credit is always desirable and advantageous from the point of view of his particular interests; the general welfare requires a discount policy on other lines Each artificial keeping down of discount rates would increase dangers in the midst of a period of prosperity and help to bring about the collapse. Only a careful attitude of reserve toward growing demands for credit, only a steady guidance of tendencies in the markets for capital and money, counteracting the dangers of the situation, keep economic development in safe tracks and at the same time guarantee the solvency of the Bank and the solidity of the monetary system.

The limitation of lombard investments.—The heavy call on the Reichsbank forced the officials to watch with re-

doubled vigilance that the claims, serving in addition to cash reserve as cover for obligations, have the greatest possible liquidity. Strictly speaking, only short bills are fully suitable as cover for demand liabilities, and the Bank Act admits them in addition to cash reserve as cover for In making lombard loans the Reichsbank employs as working capital mainly that part of the capital stock and reserve fund not invested in business sites. Bank Act allows it also to hold lombard claims as cover for moneys subject to repayment on demand, but in the interest of liquidity too great an expansion of lombard investments beyond the Bank's own means is not desirable, at least in times of unusual stress. From the end of the eighties lombard investments of the Reichsbank had expanded considerably more than bill investments. Whereas up to 1888 they fluctuated at 50,000,000 marks, they amounted on an average in 1896 to 106,000,000 marks, and in 1897 to 108,000,000 marks. At the same time they were subject to enormous fluctuations, and showed specially high amounts at quarterly and yearly endings. They amounted on December 31, 1895, to 211.000,000 marks.

This increase was undoubtedly promoted by the introduction of the preferential rate for bonds of the Empire and the federal states. But while this undesired expansion urged the abolition of the preferential rate, the Reichsbank was requested in 1896 and 1897 to extend its preferential rate to mortgage bonds (*Pfandbriefe*) issued by Prussian Landschaften. Of these about 2,000,000,000 marks were issued in 1896. Most of the Landschaften had taken advantage of the low interest rate in

1894-95 to convert their mortgage bonds to 3 per cent. and these conversions had met with only partial success. The Landschaften held large amounts of converted mortgage bonds in their reserves, and the quotations on them sank. The extension of the low lombard interest rate to these securities was to render it easier for Landschaften to obtain money on mortgage bonds, increase the demand for them, and raise their market value. It was, however, a wrong assumption that the difference between the prices quoted for these bonds and government bonds depended on the more favorable lombard terms for the latter; for this difference had existed before the introduction of the preferential rate for bonds of the Empire and the federal states, and it did not diminish, since later the preferential rate was abolished. consequently impossible that a preferential rate for mortgage bonds would have brought the Landschaften the expected advantages. On the other hand, it seemed certain that such a measure would lead to a further increase of lombard investments of the Reichsbank at a time when measures for limiting lombard investments appeared imperative. The wish of the Landschaften, which was opposed when put before the Reichstag, could therefore not be granted. On the contrary, the Reichsbank found itself compelled to abolish the preferential rate for imperial and state bonds, on and after July 1, 1897. The measure has proved good. The average advances have receded from 108,300,000 marks in 1897 to 80,000,000 marks in 1900, while the average bill investments have simultaneously increased from 644,800,000 to 800,200,000 marks.

Movement of discount rate in general.—The abolition of preferential rates for imperial and state bonds and the resulting limitation of lombard loans was, however, only a secondary measure. Of the tasks before the Reichsbank. the regulation of the discount rate was most important. Only a considerable increase in the discount could keep the rapidly growing credit demands within the limits necessary for the entire national economic system and for the solvency of the Reichsbank. The average discount rate of the Reichsbank rose in the years 1895-1900 from 3.14 per cent to 5.33 per cent and the average profitableness of bill investments from 2.66 to 5.36 per cent. The Reichsbank ceased after April 1896, to discount for anybody below the official rate. A rate of 3 per cent could be given at times from 1895 to 1897; 4 per cent was the lowest rate in 1898 and 1899, and 5 per cent in 1900. In 1899 and 1900 the discount rate was 7 per cent, the highest in the Bank's history.

So far as foreign relations of our monetary affairs are concerned, the Bank officials sought to supplement and support the discount policy by granting advances free of interest on gold; they succeeded in this way, especially from 1898 to 1900, in materially strengthening the gold reserve against the continually increasing demand of domestic trade.

The discount policy in detail during the period from 1895 to 1900 was as follows:

Discount in 1895.—The change in all economic conditions was manifested suddenly and forcibly in the second half of 1895. As late as August the market discount in

Berlin fluctuated only between 11/2 and 15/8 per cent and the Reichsbank discounted during the whole month at a private rate of 2 per cent. Toward the end of September a stronger demand for money appeared, and in the last week of September the investments of the Bank advanced at one bound from 684,000,000 to 888,000,000 marks. while the gold reserve, which on August 23 still amounted to 711,000,000 marks, receded to 611,000,000 marks on October 7. The Bank became liable to the note tax on September 30 for 46,000,000 marks, and again on October 7 for 20,700,000 marks. It had ceased discounting at the private rate on September 18; when the money market was easier after the change of quarter, the market discount sank, from October 1 to 2, from 21/8 to 23/8 It resumed these discounts for a few days (up to October 10). The reflux at the Bank, however, did not correspond with the great strain at the close of the quarter; the discounts at the private rate were therefore suspended after October 11. Considering its condition, which in itself was extremely favorable, the Reichsbank thought it possible to avoid raising its discount rate, which was 3 per cent since February 5, 1894, although the contingent had been exceeded at the quarter ending. An increase of the discount could not be avoided, however, owing to a crisis from overspeculation in gold mines, an increased demand for money, and the withdrawal of large sums of gold for the Bank of Austria-Hungary. On November 7 the market discount reached the level of the Bank discount, and this was raised on November 11 to 4 per cent. Nevertheless, the strain again became marked at the close of the year.

Investments increased in the last week of December from 769,000,000 to 1,000,000,000 marks, gold holdings fell to 571,000,000 marks, and the tax-free note contingent was exceeded by 148,000,000 marks, the greatest excess since the establishment of the Bank. Still, the Bank decided not to raise the discount again, since a strong reflux and a material strengthening of its position was to be expected in the early weeks of the new year.

As a matter of fact, the investments declined to 583,000,000 marks by February 15, 1896, a decrease of 417,000,000 marks against December 31. On February 23 the cover again exceeded notes by 23,700,000 marks, and the gold reserve on this day reached 668,500,000 marks—a sum higher than seven weeks earlier by nearly 100,000,000,000 marks.

This development proves how unjustified is the assertion, repeatedly made in later years, that the diminution of gold reserve by more than 200,000,000 marks in the course of 1895 was not caused by increased requirements of domestic trade, but by an outflow of gold to other countries, particularly to Austria, which the Reichsbank opposed only too late and too feebly through its discount policy. The fact that 100,000,000 marks in gold flowed back to the Reichsbank from domestic circulation during the first seven weeks of 1896 in spite of the undeniable great increase of the domestic demand proves that the diminution of the Reichsbank's gold reserve beginning February 1895, was attributable only to a small extent to a flow of gold to other countries and was attributable mainly to the increased demand of domestic trade.

Discount from 1896 to 1898.—In consequence of a favorable turn on the money market, the Reichsbank again resumed its discounts at the private rate at the beginning of February, and reduced its official rate to 3 per cent on February 12. When the change of quarter March-April showed an excess of note contingent by 44,000,000 marks, the private rate was suspended and has not since been resumed.

The years 1896 and 1897 and the first months of 1898 are similar in their whole development. They are entirely dominated by the development of the domestic demand for money, which reached its lowest point in February, increased regularly at the quarter endings, and forced the Reichsbank to exceed the note limit, reached a high point in the last quarter and led to large claims on the Reichsbank.

As a result, the movement of the discount rate in these years is similar. The first three months of the year brought reductions of discount to 3 per cent in the years 1896–1898; this rate remained in force in 1896 until September 7, in 1897 until September 6, and was then raised to 4 per cent. A rise to 5 per cent followed in 1896 on October 10, in 1897 on October 11.

The outbreak of the Spanish-American War brought a change in this regularity. In anticipation of impending complications, the United States began in February to hold back its usual offers of gold and sought to get gold for its credit balances in Europe. German exchange on London and New York rose to the gold point; then began a flow of gold to America, which did not equal the

simultaneous outflow from France and England, but must have been highly undesirable, considering the state of the German money market and the strain to be expected in the autumn. On April 9, 1898, therefore, the Reichsbank raised its discount rate to 4 per cent, which had been 3 per cent since February 18. This was one of the rare cases since the middle of the eighties in which the regard for international gold movements has caused an increase of discount.

According to American statistics, the gold imported by the United States from Germany in 1898 amounted to \$8,400,000. This outflow of gold in conjunction with the regular autumn needs led to such a strain on the resources of the Reichsbank that the note limit was exceeded by 276,500,000 marks on September 30, and the Bank remained on the wrong side of the contingent during the whole of the last quarter, with the exception of the first half of December. The domestic demand for money had increased so much, that on September 30 the investments amounted to 1,124,000,000 marks, which surpassed the sum for the corresponding day of the previous year, itself a record, by more than 100,000,000 marks. The discount was raised on October 10 to 5 per cent, as in the two preceding years; but the increase this time was insufficient. October 31 showed another excess of note contingent by 155,000,000 marks, and as November did not bring the absolutely requisite reflux, the discount rate had to be raised on November 9 to 51/2, on November 19 to 6 per cent. Yet the strain on the Bank at the close of the year was somewhat greater than at the end of the third quarter.

The market discount followed in general the discount rates of the Reichsbank. On December 19 and 20 it rose to 5 and 5% per cent.

Discount in 1899.—The year 1899 brought the previous development to a climax. The increase in prices of industrial raw and auxiliary materials, the activity in floating new undertakings, and speculation in industrial securities made extraordinary progress at home and abroad. The strain on the market for money and capital became more acute on every side, and led in less financially strong countries, as in Russia and the Balkan States, to serious crises.

In Germany the regular relief after the great stringency at the year's close did not occur to the full extent. The increasing demand for money and the scarcity of funds hardly allowed the market discount to sink below 4 per cent in January and February. The gold reserve also remained lower in the second half of February by 70,000,000 marks, the investments higher by 50,000,000 marks, and the uncovered note circulation by nearly 100,000,000 marks than in the previous year.

The officials of the Bank could therefore proceed only hesitatingly and gradually with a reduction of the high discount rate. Not till May 9 did they make it 4 per cent. By the middle of June, however, the investments of the Bank were higher than in the previous year by more than 90,000,000 marks, and as the tension was growing rapidly as compared with the preceding year, an advance of the discount to $4\frac{\pi}{2}$ per cent was necessary as early as June 19.

The Bank of England at that time made great exertions to strengthen its small gold reserve. A meeting of representatives of private banks had expressed their dissatisfaction with the low metal reserve of the Bank of England, and had threatened to establish a gold reserve independent of the Bank of England. Besides this, the impending outbreak of the Boer War forced the Bank to plan a substantial strengthening of its position. English capital in Germany was withdrawn in an increased measure, the German rate of exchange on London reached the gold point at the end of July and the beginning of August, and gold began to flow from Germany in considerable amounts.

In view of the impending autumn needs, the Reichsbank could not allow this outflow without resistance, and raised its discount to 5 per cent on August 7. The Bank was successful in that the rate of exchange on London fell to parity in September and the outflow of gold ceased.

Yet the contingent was exceeded on September 23, although by only half a million. Up to September 30 the excess increased to 371,000,000 marks, and thus surpassed the greatest excess of the previous year by no less than 95,000,000 marks. The investments on this day were 1,249,000,000 marks—125,000,000 marks above the previous highest figure; the gold reserve amounted to 450,000,000 marks, against 480,000,000 on the same day of the previous year, and thus reached its lowest point since September 30, 1893. Silver holdings amounted to only 236,000,000 marks, against 258,000,000 marks in the previous year. The total metal reserve represented not quite half of the note circulation.

The unheard-of increase of investments showed what enormous proportions the demands for temporary credit had assumed. The danger of an overstraining of credit and of a credit crisis required sharp preventive measures, particularly since the outbreak of the Boer War, and the strong demand for money in England and in France made support by foreign money appear out of the question.

The officials of the Bank therefore raised the discount on October 3 to 6 per cent. This measure had the effect of reducing the surplus of investments this year over the previous year from 125,000,000 marks on September 30 to 46,000,000 marks on November 7.

This relative improvement did not continue, however, as the Bank of England raised its official rate at the end of November to 6 per cent. The exchange for short bills on London, which at the end of November had declined to 20.42, began to rise, and an outflow of gold threatened to aggravate again the dangers of the situation at home.

It is true that the Reichsbank had managed to strengthen its gold reserve from 450,000,000 marks on September 30 to 529,000,000 marks on December 15, chiefly by liberal advances free of interest on gold arrivals. It had in this way obtained nearly 100,000,000 marks of gold in the last month, particularly from Russia. What dangers the increased domestic demand for money was leading to are seen from the important increase of the investments of the Reichsbank as compared with the previous year. On November 7 the investments had exceeded those of the previous year by only 46,000,000 marks. ence increased rapidly; it amounted to 137,000,000 on November 30, 167,000,000 on December 7, and 213,000,000 marks on December 15. To prevent the gravest dangers, the Reichsbank had to prepare for this development up to the close of the year. The Reichsbank officials, therefore, decided on December 19 to raise the discount to 7 per cent, a rate which had not been reached since the war of 1870.

Nevertheless, the difference of investments increased until December 23; they amounted on this day to 249,-000,000 marks more than those of the previous year. The rates of exchange on London rose above the gold point, since German banks stopped sending gold to England on account of the difficulties in the domestic money market. The check rate on London was quoted in Berlin at 20.60. Never since the standard crisis of 1874–75 had foreign rates of exchange shown such deviations from parity.

The advance in discount to 7 per cent, however, effected its most important purpose. The tension increased in the last week of December in much the same degree as in the preceding year. Whereas the investments had on December 23 exceeded the amount of the previous year by 249,000,000 marks, the difference at the end of the year was only 158,000,000 marks. Although the investments still exceeded the amount for September 30 by 2,300,000 marks, yet, in consequence of the larger metal reserve, the total status of the Bank was somewhat more favorable than at the close of the third quarter. The excess over contingent was smaller by 34,000,000 marks and the metal cover for notes and other demand liabilities was several per cent better.

Discount in 1900.—In spite of the extraordinarily high discount rate of 7 per cent, the first months of 1900 brought no reflux corresponding to the strain in the last quarter of 1899. The upward movement in industry and commerce and overspeculation on the bourses con-

tinued undiminished even after the dangerous obstacle of the year's end had been surmounted; prices of most manufactured articles and quotations for mining, industrial, and bank securities still advanced. demand of domestic trade for currency was greater than in the same months of 1899. The investments of the Reichsbank remained until March higher by 100,000,000 marks than those for the corresponding time of the preceding year. Foreign rates of exchange also took unfavorable turns, and in place of the great influx of gold in December, 1899, an outflow of gold occurred. especially to England and the Netherlands. Under these conditions the Reichsbank could lower its discount rate only with the greatest caution. It reduced the rate on January 12 to 6 per cent, and on January 27 to 51/2 per cent (cf. Table 63). Although private discount declined greatly after the end of the year, and sank in January as low as 334 per cent, a further reduction of the discount rate of the Reichsbank was impracticable for months, not only on account of the great amount of its investments and claims for credit, but particularly on account of the low cash holdings, which on March 31 were less by 83,000,000 marks than at the same time in the preceding year, and on April 15 less by 97,000,000.

Not until May and June did the dangerous development stop and finally improve. The turn was brought about by the collapse in April of overspeculation in mining and industrial securities, and by a gradual subsiding of the industrial "boom." Bill circulation remained high, as is shown by the proceeds of bill stamps; it was even more than it had been in 1899. That the begin-

ning of the decline of industrial prosperity is attended first of all by a greater demand for short credit was shown again on this occasion, as in 1883 and 1890. But in spite of the further increase of bills the bill investments of the Reichsbank showed a considerable decrease from June onward, as compared with the previous year. Its total invested capital of 1,033,000,000 marks at the end of June was less by 54,000,000 marks than the investments on June 30, 1899, and this difference was materially increased in the following months. The explanation is that the great sums of ready money, which up to that time had been tied up by overspeculation, were partially set free by the collapse of securities on the Bourse, and were now used on the discount market.

In addition to the relief thus effected, the substantial strengthening by the Reichsbank of its gold reserve helped to improve the whole situation. Whereas in the first half of the year the gold reserve had been less than in the previous year—and at times considerably less—July 7 showed for the first time a higher gold reserve (by 15,500,000 marks).

The whole improvement in the position of the Reichsbank coincided with the outbreak of the Chinese disturbances. The claims on the money market in consequence of the expedition to China imposed a certain restraint on the Reichsbank. Nevertheless, the Reichsbank was able to lower its discount rate on July 13 to 5 per cent, and was also able to retain this rate until the close of the year, even against the demands of the autumn which were extraordinarily heavy in 1900, and the uneasiness of the market called forth by the exposure of the mismanage-

ment of two Berlin land-credit banks (Bodenkreditbanken). In view of the ensuing mistrust, all mortgage banks (Hypothekenbanken) were obliged to take steps to strengthen their cash reserves. Mainly on this account the position of the Reichsbank at the close of the year showed a strain little less than the greatest run on the Bank on September 30, 1899. Investments increased to 1.319,000,000 marks, while the highest amount for 1900 had been only 1,251,000,000 marks. That the excess of the contingent was smaller than on the most unfavorable return day of 1899-356,000,000 against 371,000,000 marks (cf. Table 23)—and that the cover for notes and demand liabilities was somewhat more favorable, was due to the fact that the Reichsbank succeeded in keeping the cash reserve higher than in 1899. The situation was doubtless also helped by the fact that most imperial exchequer bills, issued for a total amount of 80,000,000 marks to raise money for the Chinese expedition, were disposed of in the United States.

All in all, therefore, although the services of the Reichsbank were still in strong demand in the second half of 1900, and although its average discount rate in 1900 (5.333 per cent) exceeded the discount rate of 1899 (5.036 per cent), the stagnation in economic prosperity may be attributed to the fact that, for the first time since 1895, the discount rate was not advanced in the second half year; indeed, the rate could even be reduced at the beginning of the second half year, and the interest rates of the second half year, in contrast to the general course, were lower than in the first half year. The market discount went through the same development. In the second half

vear it fell more and more behind the rates of 1899, which it had exceeded in the first six months. Through this state of affairs a light is thrown on the impelling factors of the development of the money market and of the interest rates during the whole period beginning with 1895. First, the decrease in gold production on account of the Boer War could not have caused the abnormal advance in interest rates at the turn of the year 1899-1900, as was asserted on many sides; the recurrent movement in interest rates began although the Transvaal war continued and the working of gold mines at the Rand could not be resumed. On the contrary, the opinion has been fully confirmed that the domestic money demand arising from unusual prosperity in industry and trade was really caused by the extraordinary money stringency and the record strain on the Reichsbank. In spite of all unfavorable conditions, in spite of Chinese disorders and the resulting need for money by the imperial government, and in spite of the shock to the bond and mortgage market-the great strain was relieved when there was a falling off in economic activity. If, after several years of most vigorous expansion, German trade assumes more moderate proportions, and if the political outlook is favorable. interest rates may return in a short time to a normal level.

RETROSPECT.

As was set forth in the introduction to this chapter, the Reichsbank was obliged to have regard in its discount policy for the unquestionable redemption of its notes and for the satisfaction of the increasing money needs of Germany. In the history of the discount policy was indicated

what particular form this task has assumed in the various economic periods and what measures the Reichsbank has adopted for its fulfillment. In conclusion, let us sum up briefly the total results of the discount policy of the Reichsbank.

It is necessary to bear in mind from the very beginning that the Reichsbank has made easy the carrying out of its discount policy by its institutions for cash deposits. by its transfer business, and its clearing houses. Transfer transactions, which were insignificant at the Prussian Bank, amounted to 164,000,000,000 marks at the Reichsbank in 1900. Of these a business of 136,000,000,000 marks was transacted without the use of specie by entries on accounts and by transfers on the books. The transactions of the clearing houses created by the Reichsbank—transactions which were handled on transfer accounts at the Reichsbank by the aforementioned methodamounted to 30,000,000,000 in 1899 and 29,000,000,000 marks in 1900. Transactions of the transfer and clearing systems of the Reichsbank amounted together in 1900 to 193,000,000,000 marks.

By developing these institutions, the Reichsbank has succeeded in meeting the increase of transactions during the economic activity in the twenty-five years of its existence without increasing monetary circulation in the same measure. The claims made on the Reichsbank by the increase of transactions were in this way substantially diminished.

But in spite of the favorable development of the transfer and clearing systems, in spite of progress in avoiding cash transfers, the increase in transactions in which money had to be the medium could be fully met only by a considerable extension of German monetary circulation, i. e., by obtaining gold from abroad and by increasing the uncovered note issue.

Each increase of uncovered notes is limited by the regard for the safety of note redemption. It is the task of discounts, by a regulative influence on credit claims, to see that a sound proportion is maintained between cash holdings and note issue. A continued and large increase of the need for currency can be satisfied, therefore, only by an increase of metallic circulation. The Reichsbank at its establishment was meant to be the medium for the importation and coinage of gold; it has so completely assumed this office that all gold in bars and foreign coin from abroad and destined for German monetary circulation goes to it. It is actually the only private body which makes use of the right of free coinage of gold. In this field it was the Bank's task to promote by its discount policy the necessary influx of gold.

To what extent the Reichsbank has succeeded is shown by the following.

The total amount of the Reichsbank's gold purchases from 1876 to 1900 was 2,629,000,000 marks. Of this, 315,500,000 marks were assigned to it by the imperial government in the years 1876 to 1879 for carrying out the coinage reform; the remainder of 2,314,000,000 marks it has, by virtue of article 14 of the Bank Act, bought from private individuals. Most, of the purchased gold bars and foreign gold coins have been delivered by the Reichsbank to German mints to be coined into imperial gold pieces. The amount of gold coined for the account of the

Reichsbank amounted altogether to 2,317,000,000 marks; 248,000,000 marks were again sold, partly for exportation and partly for home industries.

Only a small part of the total gold purchases by the Reichsbank has remained in its own reserve. the greater part, after being coined into imperial gold pieces, has been put by the Reichsbank into free monetary circulation. Its own gold reserve has increased from 341,000,000 marks at the beginning of 1876 to 501,000,000 marks at the end of 1900, after dwindling at times (in 1881) to 151,500,000 marks and rising to nearly 800,000,000 marks If we compare the position of the Bank on December 31, 1900, with that of December 31, 1875, only 160,000,000 marks of the gold purchases have remained in the Reichsbank; the whole remainder, deducting the resales—that is, 2,226,000,000 marks—has flowed from the Bank into free circulation. German gold circulation has not been increased by this full amount, since considerable sums of imperial gold coin have in the quarter of a century been partly exported and partly melted down for use at home for industrial purposes. Still, careful estimates for the end of 1900 give a gold specie reserve of at least 2.800,000,000 marks, against some 1,300,000,000 marks at the beginning of 1876, an increase of 1,500,000,000 marks, and this whole increase, as already mentioned, has come through the Reichsbank.

Whereas the Bank has in this way succeeded in satisfying largely the permanent increased demand for metallic currency—a demand which has occurred in spite of cash-saving institutions for transfer accounts and clearing-houses—its note privilege, corresponding to the nature of

note issues, has mainly been of service in adapting the currency to periodical fluctuations of money demand. A permanent expansion of uncovered notes has, therefore, not taken place. So far as a temporary extension has become necessary for supplementing metallic circulation (particularly since 1895), this expansion has been counterbalanced by the fact that the increase of cash reserve along with more uncovered notes has still made possible a sound cover-proportion.

At the same time it was always the endeavor of the Reichsbank to meet legitimate requests for cheap credit in so far as its own position and the state of German monetary affairs allowed. Whereas the Prussian Bank had never lowered its discount rate below 4 per cent, the Reichsbank was able to reduce its discount rate to 31/2 per cent in the very first year of its existence, and later, from 1879 onward, it has been able in most years to maintain an official discount rate of 3 per cent. Its private discount has frequently gone below this rate. The officials of the Reichsbank have always been guided by the principle that their first care is the safety of note redemption and the maintenance of the imperial standard. heavy short credit claims and an increase of uncovered notes up to the tax-free limit they have not hesitated to take those preventive measures (advances of interest rates) which, in many years' experience in most countries, have proved to be the only effective ones in preventing an overstraining of credit and a jeopardizing of the monetary When in such periods the interest rates of the Reichsbank have exceeded those of other great central banks, especially those of the Bank of France, the Reichs-

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bank has not been to blame, as has occasionally been asserted; the different conditions and the heterogeneous development of the two countries were to blame. many, with less wealth in money and capital, has experienced a considerably greater development of economic forces than those lands with which its money market is as a rule compared; and this development of forces was possible only with a greater strain on the capital and currency at its disposal. Owing to this Germany has, in general, a higher level of interest than countries like France and England. The Reichsbank could have kept the rate of interest lower in only one way—by an increase of its uncovered note issue, which at times has assumed extraordinary proportions. In this way the Reichsbank would have jeopardized its own liquid state and the basis of German monetary and credit operations; it would consequently, in case it had given way to the request for an artificial lowering of interest rates, have lost sight of its first duties, have shaken confidence in the German monetary and credit system, and finally have brought on an advance of the price of credit—an advance which would no longer be governed by the influence of the Reichsbank.

CHAPTER VIII.

THE SERVICES PERFORMED FOR THE FINANCE ADMINISTRATIONS OF THE EMPIRE AND THE FEDERAL STATES.

LEGAL BASIS.

A substantial return by the Reichsbank for its note privilege consists in the services imposed upon it for the financial operations of the Empire. Section 22 of the Bank Act provides that:

"The Reichsbank must receive and make payments for the account of the Empire without compensation.

"It is authorized to undertake the same transactions for the federal states."

This duty is considerably extended by section 11 of the Reichsbank Statute:

"It is incumbent upon the Reichsbank to manage gratuitously the balance to the Empire's credit (sec. 22 of the Bank Act), and to keep and render account of all payments received and made for the Empire."

THE REICHSBANK RECEIVES AND MAKES PAYMENTS FOR THE EMPIRE.

By these provisions the Reichsbank transacts the business of the central treasury (Zentralkasse) of the Empire, which, as is well known, avails itself to a large extent of the treasuries of individual states for its payment operations. This is done through a special depart-

ment of the Reichsbank's main office, the main imperial treasury (Reichshauptkasse), in accordance with official instructions issued by the Chancellor of the Empire. All cash sums due to the main imperial treasury flow into the Reichsbank, and all cash expenditures of the main imperial treasury are made by the Reichsbank, in accordance with the instructions of the various imperial government authorities entitled to give such instructions. The holdings of the main imperial treasury form a part of the Bank's holdings; only the bookkeeping is separate. This and the rendering of accounts represent the real tasks of the Bank's department known as the Reichshauptkasse.

According to a special agreement with the navy department (Reichs-Marineverwaltung), the Reichsbank attends through the main imperial treasury to the business of the main naval treasury (Marinehauptkasse), in accordance with regulations in force for the central imperial treasury (Reichs-Zentral-Kassenführung).

The Reichsbank helps the body managing the national debt (Verwaltung der Reichsschulden) apart from other services (cf. p. 302 ff.), in redeeming at all its offices the interest coupons of imperial bonds, in paying out or entering on the account of the authorized receiver the interest on claims registered in the national debt register, in distributing through its offices new interest coupons of the imperial bonds, and by acting as medium in the delivery of bonds in place of canceled claims on the national debt register.

Since 1879 the Reichsbank has also fulfilled important duties for the the imperial postal system (Reichspostver-

waltung). This is done to avoid, in the case of post-offices situated at a "bank place," the difficulties, dangers, and costs of providing numerous post-offices with the requisite cash for carrying on business.

The main agreement with the imperial postal system is that post-offices bring their spare moneys to the Reichsbank and withdraw from it the sums required—both for the account of the general postal treasury (General postkasse).

The Reichsbank, by adapting its business arrangements to this end, has supported the endeavors of the imperial postal system to bring about a further saving in currency by inducing persons with a current account at the Reichsbank, who regularly receive and send out post-office orders, to settle such transactions by entries on their account.

THE REICHSBANK AS A MEDIUM FOR FINANCIAL OPERA-TIONS OF FEDERAL STATES.

Only two federal states, Prussia and Baden, have made use of the opportunity afforded by section 22, paragraph 2, of the Bank Act, of assigning to the Reichsbank, according to agreement, any or all of the duties it performs for the Empire; these states have taken this action with the idea of using the Reichsbank as a medium for financial operations between their state treasuries and their large public treasuries, so far as these treasuries are at a "bank place." In accordance with the agreements, these treasuries also bring to the Reichsbank their disposable holdings and receive from the latter the requisite means for accounts with the general state treasuries. In Prussia this system has been gradually extended

to fiscal operations of the aforementioned larger public treasuries and to subordinate treasuries, so that at the present time fiscal operations between public treasuries of nearly all administrative departments situated at "bank places" are performed only through the Reichsbank.

The Reichsbank also redeems for a small fee the matured interest coupons of state debt bonds. The Bank has likewise undertaken for the free city of Hamburg the management of the loan of 1879.^a

BUSINESS FORMS.

The business forms in which the Reichsbank exercises these functions in the service of the treasuries of the Empire and the federal states have varied.

In conformity with the official instructions of the Chancellor for the main imperial treasury under date of December 29, 1875, and the normal regulations issued by him February 4, 1876, for carrying out section 22, paragraph 2, of the Bank Act, special separate accounts were kept for the main imperial treasury and the general state treasury of Prussia at the Reichsbank's head office, and one for the general state treasury of Baden at the independent branch of the Reichsbank in Karlsruhe. Payments could be made without charge to these accounts by anyone, in Berlin and at every head branch and branch of the Reichsbank, but only in sums of 10,000 marks and upward in the case of the general state treasuries of Prussia and Baden. Withdrawals by the state holding the account took place directly against special receipt, and

a Over and above these, only the coupons of loan certificates of the East Prussian Landschaft and of the Central-Landschaft for Prussian states are redeemed by the Reichsbank.

only at the office keeping the account; a special authorization from the Reichsbank Directorate was necessary in case sums were to be paid out at other offices of the Reichsbank. This authorization could be given once for all in the case of certain payments repeatedly occurring, as, for instance, those caused by the redemption of interest coupons. Receipts and expenditures for these accounts were booked at all Reichsbank offices to the account of the office keeping that particular account, and were finally booked by the office in question.

The increasing business of the Reichsbank as agent in fiscal operations in Prussia between larger public treasuries and subordinate treasuries was managed by deposits and withdrawals open to everyone.

Other regulations were in force to provide imperial postoffices with the requisite cash. The general post-office treasury was connected with the general transfer system of It would have seemed natural to include the Reichsbank. other post-office treasuries in the transfer system and to allow financial operations to take place under its forms. This method was not adopted for the present; a special institution was created. The general post-office treasury through the head branch of the Reichsbank managing its account, opened definite credits for the various post-office treasuries at the Reichsbank branches with which they were to have dealings; the amounts claimed were charged to the head office of the Reichsbank, and entered on the account of the general post-office treasury. On the other hand, the dispensable holdings of the post-office treasuries were directed to the branch offices of the Reichsbank for the account of the general post-office treasury and entered on this account. The main imperial treasury also took part, according to special agreement, and its balance has since March 1881, served as balance for the general post-office treasury, so that the latter did not need to keep such a balance. Instead, the deficits or surplus at the daily balancing of accounts was entered to the account of the Empire.

The multiplicity of forms under which the Reichsbank cooperated in keeping the accounts of imperial and state administrations was increased by the evergrowing number of imperial and state treasuries that opened current accounts at the Reichsbank under the ordinary conditions. This showed that the arrangements did not satisfy the needs of these treasuries, and at the same time pointed out the way to a uniform reorganization. Such a reorganization has been going on since 1896, and is near its final adjustment. Its result has been that at the present time the Reichsbank acts as intermediary in financial operations of the treasuries of the Empire and the federal states almost exclusively through its transfer system. To this end transfer accounts have been opened for all treasuries to be dealt with, for the main imperial treasury, and for the general state treasuries of Prussia and Baden. Special accounts previously kept for them were closed. The residues from their current accounts now represent the balance held at the Reichsbank by the Empire and the two states named (cf. Table 27).

The general regulations for the transfer system of the Reichsbank are, with a few not unimportant exceptions, in force for transfer accounts of the imperial and state treasuries. The treasuries in question are divided into four systems—the main imperial treasury, the general state treasury of Prussia, the general state treasury of Baden, and the general post-office treasury. Each one of these has its subordinate offices. Within each system, only the head treasury has to keep a large enough balance to recompense the Reichsbank for its trouble. The general post-office treasury is excepted from this rule. The latter's transactions are daily added to or deducted from the balance of the main imperial treasury. The other treasuries of each system have only to see that the balance on their transfer accounts is enough to cover the checks drawn by them. They have been permitted to take part in the transfer system of the Reichsbank without complying with the requirement of a minimum bal-This makes possible settlements by transfers between the main imperial treasury and the chief public treasuries. With few exceptions they have made use of this permission.

Furthermore, those treasuries which settle directly with the main imperial treasury—the general treasury of Prussia, and the general post-office treasury—are allowed to strengthen their balances from the balances of the three treasuries mentioned. This is done through a special form of check of different color, which is presented at the Reichsbank office keeping the account. This office at once enters the amount of the check to the credit of the treasury presenting it and deducts this sum from the balance of the central treasury concerned. Such an arrangement has not been made for the public treasuries of Baden connected with the transfer system of the Reichsbank.

Adequate precautions have been agreed upon with the finance administrations of the Empire and Prussia to prevent exhaustion of balances of central treasuries by the presentation of such checks and to avoid a violation of section 22 of the Bank Act, according to which the Reichsbank may make payments only to the extent of the balance, and therefore may not advance money to the Empire and the federal states.

For the transfer accounts of the main imperial treasury, and the general state treasuries of Prussia and Baden, there is the special provision that sums can be deposited without charge at all head branches and branches of the Reichsbank by persons not holding a current account at the Reichsbank; in the case of the two state treasuries, however, the minimum payment is 10,000 marks.

Finally, certain imperial and state treasuries not situated at "Reichsbank-places" have in the interest of their financial operations also been included in the transfer system.

EFFECT OF THE TRANSFER SYSTEM OF IMPERIAL AND STATE TREASURIES.

Transfer transactions between the Reichsbank and the imperial and state treasuries have proved advantageous. The treasuries have not only been saved the expense and dangers of numerous consignments of cash, but have also been relieved of holding larger amounts, of making the requisite arrangements, and of bearing the risks connected therewith, in that they can at any time supplement their supply of money from the holdings of the Reichsbank. By sending their surplus cash to the

Reichsbank and thus increasing the metallic cover for its notes, they turn currency to account which would otherwise lie idle. The advantages to the Reichsbank are considerably diminished because the imperial and state treasuries usually make the greatest demands on the metal reserve of the Reichsbank just at those periods when claims from other sides are heaviest.

The imperial and state treasuries, by entering the transfer system of the Reichsbank, have gained the advantage of using transfer arrangements for payments to anyone; there is only one restriction, namely, that transfer accounts are not to be employed regularly in payments of wages, salaries, and pensions.

The following figures show the extent to which the services of the Reichsbank are claimed by the treasuries of the Empire and the federal states. At the close of 1899, transfer accounts were kept at the Reichsbank for as many as 1,451 such treasuries; 2,665,000,000 marks in cash were paid into these accounts, 5,940,000,000 marks remitted by means of red checks, and 2,211,000,000 marks were withdrawn in cash.

The total transactions on transfer accounts of the Empire amounted in 1900 to 10,892,000,000 marks; on the old account of the main imperial treasury they amounted to 1,485,000,000 marks in the first year of its existence, and 2,154,000,000 in the last year (1897). The increase shows how much more the Reichsbank's arrangements are utilized for the affairs of imperial treasuries since the transactions have been carried by means of transfers.

OTHER SERVICES FOR FINANCE ADMINISTRATIONS.

The services rendered by the Reichsbank to the Empire and the federal states are not confined to treasuries. The Reichsbank performs great services in granting credit. It is true that on account of unfortunate experiences in other countries through too great a demand for state purposes on the funds of the central bank of issue, limits have been set by the Bank Act, which, in section 35, provides:

"Business may be done with the finance administrations of the Empire or German federal states only within the regulations of this act and those of the Bank Statute; when terms are to be given other than those general in banking, the matter must first be brought to the knowledge of the deputies, and on the motion of only one of the said deputies be laid before the central committee. The business must be excluded unless a quorum of the central committee decides in its favor by a majority vote."

According to section 13, paragraph 4, however, the Reichsbank is allowed to discount short exchequer bills issued by the Empire or the federal states in order to strengthen temporarily their funds. This frequently happens with exchequer bills of the Empire when money is scarce (cf. p. 169).

The Reichsbank has assisted greatly in taking up imperial bonds. When the bonds were taken up by an association of banks and bankers, the Reichsbank, together with the Seehandlung of Prussia, placed itself at the head of this association, and very soon displayed subscription lists in Berlin and at its branches. When the bonds have been offered directly to the public for subscrip-

tion, the Bank has, at the instance of the imperial ministry of finance, obtained signatures in conjunction with the Seehandlung and the first-class banking establishments. The head office and all branches served as subscription offices in these cases. The same happened when the issue of 1899 was taken by the Deutsche Bank at a fixed price. By order of the imperial ministry of finance, the Reichsbank helped to place 4 per cent exchequer bills to the value of 80,000,000 marks on the American money market in 1900.

The Reichsbank has regularly offered its offices for the negotiation of loans of the kingdom of Prussia.

In conclusion, it must be mentioned that the Reichsbank assisted in converting 4 per cent imperial and Prussian state bonds in 1897 by allowing its own officers to stamp the imperial and state loan certificates and the interest-coupon sheets handed in to it.

CHAPTER IX.

REGULATION OF MONETARY CIRCULATION.

THE PROBLEM OF REGULATING MONETARY CIRCULATION.

The chief task of the Reichsbank, according to section 12 of the Bank Act, is the regulation of the monetary circulation of the whole Empire. It is most important that an equilibrium be maintained between currency and money demand. The Bank solves this problem through note issue; by its discount policy it promotes the importation of gold from abroad, checks the exportation of gold to other countries, regulates the domestic demand for money so that the demand can be satisfied without a dangerous extension of uncovered note issue. It also cooperates in supervising the currency—a task mainly incumbent on the ministry of finance. It watches the purity, full weight, and good condition of the various kinds of currency, and furthermore, it distributes the whole currency and the various kinds of coin over the different divisions of the Empire in accordance with changing requirements of trade.

THE REGULATION OF CURRENCY WITH RESPECT TO ITS GOOD CONDITION.

A special provision in section 9 of the act of December 4, 1871, concerning the coinage of imperial gold coins, states that imperial gold coins which, through wear and tear, no longer have the minimum required weight and

have been accepted in payment by public treasuries, credit institutions, or banks, may not again be issued by these treasuries and institutions.

COUNTERFEIT COINS.

The Bundesrat has made a number of regulations for imperial and public treasuries concerning the treatment of counterfeit, worn, and mutilated coins or notes. These regulations are contained mainly in a proclamation of the Chancellor dated May 9, 1876. The officers of the Reichsbank have also been instructed in the regulations issued by the Reichsbank Directorate to act in accordance with the provisions in the proclamation of the Chancellor.

According to these instructions counterfeit and debased imperial coins coming into the hands of Bank officers are to be held. If the counterfeit piece is at once recognized as such, notice is given immediately to the proper justice or police authorities. In case the impurity is doubtful the coin is sent for examination to the imperial mint (Münzmetalldepot).

DAMAGED COINS.

Legal coins of the Empire or federal states, which are genuine but have been damaged illegally, are also to be held, rendered unfit for circulation by breaking or cutting, and handed back to the person delivering the same, even when the coins have not lost in weight. This procedure, however, is not followed for coins which have defects in coinage or coins which are damaged so slightly that they are still good as circulating medium. Reimbursement for coins with defective minting is made by the imperial mint in Berlin. Such coins received by the Bank officers are to

be sent quarterly to the mint. The amount is debited on the account of the main imperial treasury.

WORN COINS.

Imperial gold coins which no longer have the minimum legal weight, also talers and imperial silver, nickel, and copper coins which have suffered a considerable loss in weight or are no longer easily recognizable, are accepted at full value. Accumulated coins of this description are sent at the end of each quarter to the main imperial treasury and refunded from the latter's account.

TESTS FOR COINS.

In the regulations for Reichsbank officials the latter are urged to weigh separately each gold coin received, since counterfeits are detected without fail by such a procedure. An exception to this rule is made, apart from the bags put up by public authorities, only in the case of bags delivered by well-known "solid" firms or mercantile houses and properly closed with their seal. In the case of bags of this kind it is not necessary to weigh the individual coins when the net weight of the whole exceeds the current weight of the given number of coins.

At the head office in Berlin there are automatic balances which weigh automatically 7,000 to 7,500 gold coins an hour and throw out worn coins that are below the minimum current weight.

TREATMENT OF COUNTERFEIT AND DAMAGED IMPERIAL TREASURY NOTES AND BANK NOTES.

Counterfeit or falsified imperial treasury notes are treated by the offices of the Bank in the same way as counterfeit and debased imperial coins. Imperial treasury notes, the genuineness of which is doubtful, are sent to the imperial debt commission to be tested. Damaged and soiled imperial treasury notes are taken in payment by the offices of the Bank, but are not reissued. They must be sent to the main treasury of the Reichsbank. The same course is followed with counterfeit and damaged notes of the Reichsbank.

THE REGULATION OF THE LOCAL CIRCULATION OF CURRENCY.

The distribution of money in accordance with the necessities of the locality is a task of great national economic importance, and the Reichsbank has undertaken to fulfill this special task.

Experience teaches that individual districts must draw in money continuously, perhaps because their monetary requirements are continually growing or their economic relations make gold flow off again to other circuits. With regard to the various denominations of coins such conditions must frequently be ascertained. There is a great national economic need of directing surplus money and individual denominations of coins to localities where a corresponding want is manifested. This need is especially great with respect to divisional money. Too great an accumulation of divisional money in individual circuits must be avoided in the interest of a well-ordered monetary circulation. circuits in which great amounts accumulate can not employ these coins for large payments owing to their limited value as tender, and have therefore no other alternative but to exchange them for legal tender. On the other hand, it is just as important in the public interest that those circuits which need large amounts of divisional money, for the payment of wages for instance, can receive such in exchange for notes and gold.

The existing medium for regulating the monetary circulation in Germany is the Reichsbank, the branches of which extend over the entire Empire. To it the market turns in its need, and to it the superfluous currency is brought by the market itself.

VARIOUS DUTIES OF THE REICHSBANK IN THE LOCAL REGULATION OF CIRCULATION.

This task is accordingly included in the important general provision in section 12 of the Bank Act, supplemented by a few definite obligations that refer only partially to the circulation of money, while the others are only of incidental importance in this matter.

Redemption of notes.—The latter duties include above all the redemption of notes. The main purpose is to maintain the full value of the Reichsbank's notes and to safeguard the German standard. This duty of redemption, however, makes it possible to adjust any superfluity of notes and lack of metallic currency. The Reichsbank is legally obliged to exchange its notes for "current German money," upon presentation at its head office in Berlin and at its branches as far as their cash holdings and monetary needs permit. The Reichsbank has never had occasion to make use of this limitation at its independent branches.

Acceptance of notes of private banks.—The obligation is also imposed on the Reichsbank by the Bank Act to accept notes of private banks of issue. In Berlin and at its branches in cities of more than 80,000 inhabitants, also at the location of the issuing bank, the Reichsbank must

accept in payment, at full face value, the notes of those private banks of issue which have subjected themselves to the regulations of the Bank Act; the Reichsbank may present these notes for redemption or employ them for payments only at the issuing bank, or for payments at the place where the latter has its head office.

The acceptance of these notes by the Reichsbank guaranteed them a certain eligibility for circulation, in contrast to the notes of those banks which have not conformed with the provisions of the Bank Act, and the circulation of which is prohibited outside their province. The restrictions on the employment of these notes in payments lead private banks of issue back again into their natural field of circulation, and limit their actual circulation, so far as practicable, to their own territory.

Redemption of imperial treasury notes.—The act also provides that the imperial treasury notes issued on April 30, 1874, be redeemed on demand in coin by the main imperial treasury, for the account of the Empire. As the main imperial treasury forms only a business department of the main treasury of the Reichsbank, the duty of redemption is in reality transferred to the latter. Although redemption primarily assures imperial treasury notes of their full nominal value, it also indirectly regulates monetary circulation, inasmuch as metallic money can be drawn from the Bank in exchange for superfluous imperial treasury notes.

Issue of gold coins for divisional money of the Empire.— An enactment in connection with the general regulation (sec. 12) makes it the duty of the Reichsbank to regulate monetary circulation. Article 9 of the Coinage Act of July 9, 1873, says:

"The Bundesrat will designate those offices which issue imperial gold coins on demand against deliveries of imperial silver coins in amounts of at least 200 marks, or of nickel and copper coins in amounts of at least 50 marks. It will also settle the details of the terms for the exchange."

On December 19, 1875, a proclamation of the Chancellor put this provision into practice. This proclamation, based upon a resolution of the Bundesrat, assigned the exchange of divisional money for gold to the main treasury of the Reichsbank in Berlin and to the head branches of the Reichsbank in Frankfort-on-the-Main, Königsberg in Prussia, and Munich. The coins to be exchanged are to be presented in suitable bags or in rolls. The payment of the equivalent in gold by the office takes place after the presented coins have been counted, which, as a rule, must be done at once, but at the latest within five days after delivery.

VOLUNTARY LOCAL REGULATION OF CIRCULATION BY THE REICHSBANK.

These few duties of redemption, acceptance, and exchange, imposed upon the Reichsbank by law or ordinance, would not be sufficient to bring about a satisfactory regulation of monetary circulation. The local regulation of divisional money circulation necessitates a much more far-reaching activity than the issue of gold coin against divisional money at four places in the Empire.

The Reichsbank has endeavored to supply the wants in the most varied ways. It goes considerably further in the acceptance of coins than would satisfy the legal requirements. Acceptance of imperial treasury notes.—Only the treasuries of the Empire and of the federal states are obliged to accept imperial treasury notes in payment, but the Reichsbank takes them without objection at any time and in any amount.

Acceptance of notes of private banks.—The notes of private banks of issue are also taken largely in payment by the Reichsbank outside those places for which a legal obligation exists, namely, at all those branches, including suboffices with a cash department, which are situated in the same province, state, or district as the issuing bank concerned; for suboffices which are in charge of one executive officer, however, there is the limitation that notes of private banks of issue may be accepted only when they are to discharge an obligation toward the Reichsbank—for instance, in the payment of matured bills. the wish of certain business circles this restriction was moderated in May 1899, so that at suboffices with one officer those persons who have made payments during the forenoon in notes of the Reichsbank, current German coin, and imperial treasury notes for the discharge of obligations, are permitted to pay in, until the close of office hours, the notes of private banks of issue for other purposes, in amounts not materially exceeding the payments made during the morning.

To this extent the notes of the Sächsische Bank are taken by the Reichsbank within the kingdom of Saxony, and, furthermore, at the branches in Halle-on-the-Salle, Gera (Greiz), and Goerlitz.

In the same way the notes of the Braunschweigische Bank are taken in payment at the branch office in Braunschweig although this bank, as is well known, has not accepted the normal statute of the Bank Act; the notes of the state bank in Bautzen, really not a bank of issue, are accepted at branches in the kingdom of Saxony, and the notes of all other South German banks of issue are taken in Bavaria, Württemberg, Baden, Hesse, Alsace-Lorraine, and at the head branch of the Reichsbank in Frankfort-on-the-Main with its suboffices.

The Reichsbank offices are instructed not to make use of the permission to employ incoming notes of private banks of issue for payments at the head office of the private bank in question, but to present them for redemption. The presentation must take place once a month at branches and places appointed for redemption by the Bank; at the head offices of the Bank, however, they must be presented immediately on receipt.

The circulation of the notes of private banks of issue and their return to the place of issue are promoted by these provisions and by the Bank Act.

Acceptance and issue of divisional money.—In order to meet the requirements of business the Bank does not apply strictly the regulation of the Coinage Act limiting the amount to which divisional coins are legal tender. The Bank offices are instructed, on the contrary, to take in payment inside their business premises imperial silver, nickel, and copper coins even for large amounts. If large sums of such coins are offered in payment to office messengers outside the premises of the bank, they must request the debtor to make the payment at the bank office. The Reichsbank has, therefore, undertaken voluntarily an obligation which is legally imposed only on the treas-

uries of the Empire and the federal states. Owing to the great network of Bank branches and the great number of payments constantly made to it by the business world, this procedure of the Bank greatly facilitates the disposal of any existing excess of divisional money.

The Bank has gone a step farther in this direction by authorizing its offices to avoid any local excess of circulating small coins by taking the same as far as practicable for the account of the main imperial treasury.

Use of talers for large payments.—On the other hand, the Bank endeavors to supply small coin whenever it is required. The Bank offices are instructed to make provision continually for the business needs of small coins. They must meet promptly the wishes of the public in the issue of taler pieces, silver, nickel, and copper coins of the Empire at any time, and on request they must hand out these coins not only in the usual "standard" bags of the Bank, but also rolled up in small amounts. Above all, the Bank has always endeavored to induce the public to make use of the taler pieces, of which there is still a large stock in its coffers. The Bank offices are under order, in cases of payments which must be made in silver, to pay out, as far as practicable, talers of the German customs union (Vereinstaler) minted in Germany.

The Reichsbank, on the contrary, makes no use of the right to pay large amounts in taler pieces against the will of the receiver. The Bank regards it as its duty to supply such amounts of gold as are required for business in Germany. It can satisfy the strong demand for crowns only to a limited extent, as the stock of coins of this denomination in its coffers is always small. Moreover, as

is well known, certain technical objections connected with coining and political reasons relating to the standard keep the finance ministry from increasing the coinage of crowns. On the other hand, the Bank is always ready to make payments on request in double crowns. Only applications for gold for exportation are subject to the restriction that they be referred by the branches to the main office in Berlin. The reason for this regulation is that the Reichsbank will not facilitate the exportation of gold by assuming the expense of transporting gold to branches situated near the boundaries of the Empire.

By making payments in gold on demand, and by accepting to an unlimited extent not only talers but also divisional money, the Bank renders it possible for circulation to throw off all superfluous talers and divisional money. In this way the circulation of talers and divisional money and the demand for small change in general intercourse cover each other as far as possible. Owing to the great amount of talers still existing, this procedure has brought to the Reichsbank, especially in former years, a dangerously large stock of silver at the cost of gold holdings. Still, the Bank officials have never entertained the idea of suspending gold payments; such a suspension would be an inconvenience to financial operations, and would jeopardize the standard (cf. p. 237 ff.).

LIMITATIONS FOR SUBOFFICES OF THE REICHSBANK.

The orders of the Reichsbank Directorate relating to monetary circulation naturally hold good to their full extent only in the case of independent branches, which constantly hold considerable amounts of cash. The same duties can not be imposed on those suboffices, the

cash holdings of which are limited. Suboffices need. therefore, accept payments in imperial silver coins and other divisional money on their business premises only when they have further use for these coins in the locality itself. They are instructed to make their payments in bank notes as far as practicable. They must at all times meet promptly the wishes of public treasuries and of the public with respect to the issue of taler pieces and imperial small coin, and, if need be, propose a strengthening of holdings at the superior branch office for this purpose. With respect to requests for coins of other denominations, especially crowns, suboffices are directed to comply only in such cases where the money is taken in bill discounts or other transactions profitable to the Bank. In all other cases, particularly in the withdrawal of deposits, the exchange of bank notes for metallic money, etc., suboffices are authorized to make a charge of one-fifth on a thousand for the issue of coins of certain denominations in place of bank notes.

THE LOCAL REGULATION OF CIRCULATION.

In order to put Bank offices in a position to fulfill tasks assigned to them in the regulation of monetary circulation, it was necessary to have a well-developed organization for the appropriate distribution of various denominations of coins among different branches of the Bank. The cash holdings of the Reichsbank can be used to their fullest extent for the regulation of monetary circulation only when the distribution of various kinds of money and the demand for various kinds at different branch offices can be supervised, and

necessary consignments of money can be directed from one place.

To render possible this centralized survey and direction to the Reichsbank Directorate, Bank offices are instructed to send a statement to the Reichsbank Directorate once a month, containing proposals for increasing various denominations and giving information as to the surplus coin of all denominations held by them. In urgent cases cash may be solicited from the Reichsbank Directorate by telegraph. The drawing of money from other branches without the assent of the Directorate is not permitted. The needs of suboffices must appear separately in the monthly statements.

On the basis of these statements, which give a perfect survey of the denominations required and at hand at various places in the Empire, the Reichsbank Directorate orders cash consignments from office to office in such a way that the needs of one locality are covered as far as practicable with the surplus of the other.

The average consignments of cash between different offices of the Bank have in recent years exceeded 2,500,000,000 marks.

The details are:

	Consignments of money.		
Year.	Between inde- pendent offices of the Bank.	Within the circuits of independent offices of the Bank.	Total.
0	Marks.	Marks.	Marks.
1895	1,388,132,000	783,677,000	2,171,809,000
1896	1,220,290,000	858,863,000	2,079,153,000
1897	1,633,043,000	993, 780, 000	2,626,823,000
1898	1,584,213,000	1,118,670,000	2,702,883,000
1899	1,431,678,000	1,360,291,000	2,791,969,000
1900	1,733,239,000	1,443,656,000	3,176,895,000

The consignments (cf. Table 74) effected on the proposal of the Bank offices in 1900 were as follows: imperial gold coins 228,500,000 marks, imperial silver coins and talers 51,400,000, nickel and copper coins 3,900,000, notes of the Reichsbank 346,200,000, and imperial treasury notes 35,300,000.

The total transactions of the exchange office at the main bank in Berlin for the different kinds in 1900 were as follows:

	Marks.
Imperial gold coins	209, 120,000
Talers	43, 932, 000
Imperial silver coins	36, 415, 000
Nickel and copper coins	3, 361, 600
Bank notes	156, 735, 000
Imperial treasury notes	22, 105,000
Total	471, 668, 600

These figures give an idea of the great demands made on the Reichsbank in regulating the local circulation of currency. The experience gained thereby has led to a continual perfection of the machinery employed.

The statistical material thus gathered offers suitable data for answering the question as to what denominations show a deficiency and what kinds a surplus. When month after month a particular denomination is required by the offices in sums larger than the surplus at other places, or conversely, when month after month larger amounts of other denominations are at hand than are required, conclusions may be drawn as to the demands of trade. In such cases remedy can be provided only by further coinage on the one hand and withdrawals on the other. Even though the Reichsbank has no voice in deciding these matters it can furnish full and reliable statements of the requirements, on which appropriate decisions can be made.

CHAPTER X.

THE CUSTODY AND MANAGEMENT OF ARTI-CLES OF VALUE—THE PURCHASE AND SALE OF SECURITIES.

THE CUSTODY AND MANAGEMENT OF ARTICLES OF VALUE.

The custody of open and closed deposits is not in the sphere of a bank of issue; such a bank can fulfill its chief duties outside this line of business. The fact that most central banks of issue take care of articles of value. especially securities, sometimes for their regular patrons, sometimes for everybody, is due to the widespread need of the public to place in safe-keeping their most valuable possessions and to the large measure of confidence usually enjoyed by great central banks of issue. There is no lack of other reliable banking institutions which carry on this branch of business. Recent years have brought new forms, based on American types, and calculated to give the public the advantages of storing valuables in a safe place outside their own dwelling. But most of these banking institutions are in the habit of taking charge of securities only from those persons with whom they have continuous business connections; they generally have not room enough to undertake the custody of other articles of value, especially those of large dimensions. The less wealthy public, however, whose circumstances render unnecessary a constant connection with a banking firm, find that the greatest financial institutions decline to

undertake the custody of objects. This public is not capable of distinguishing the reliable from the unreliable second-rate financial institutions. If individual instances of embezzlement and losses occur, as have happened at times, the mistrust thus occasioned is usually directed also against such banking houses for which grounds for apprehension do not exist. Disagreeable experiences of this kind have awakened on every side the desire for a depository with a reputation beyond all doubt. only natural that under such circumstances the public eye should fall first of all on the central bank of issue of the country, on the "bank of banks," the notes of which, redeemable at any time, are in everybody's possession, the solvency of which according to general belief is as strong as that of the state. Thus it has come to pass that nearly all great national banks have introduced the storage business, and that some of them have at great cost fitted up large rooms solely for this purpose, and have made them as secure as possible against fire and burglary. Some central banks confine themselves exclusively to the custody of closed receptacles in rooms which they place at the service of their regular customers; others take into custody only securities which are open when handed to them, and combine therewith a more or less comprehensive management; others place their services at the disposal of the public in both ways. The Prussian Bank belonged to the last order; it had for a long time undertaken the care of closed deposits, but had introduced the acceptance of securities for safe custody and management in 1873—only a few years before its conversion into the Reichsbank. The popularity which these lines of business had enjoyed among all classes made their continuation through the Reichsbank a necessity, and found expression in the Bank Act, which empowered the Reichsbank "to take objects of value into custody and management" (secs. 8 and 13).

CLOSED DEPOSITS.

The simplest form of these deposits consists in the acceptance of closed receptacles, the contents of which are not noted by the Reichsbank as depositary, and for the custody of which nothing is required except suitable fire- and burglar-proof rooms. Such rooms are already at the disposal of the Reichsbank at all its branches having facilities for keeping cash. Owing to the obligation incumbent upon the Bank of keeping everywhere large sums of money on hand, these rooms are partly in the form of vaults, built with brick or stone and supplied with specially constructed iron or steel doors, and partly in the form of ordinary safes. The latter. with which most suboffices are fitted, suffice only for the needs of the offices themselves; on the other hand, the rooms for valuables, with which the independent offices and some of the larger suboffices are fitted, are almost without exception in the bank buildings, and, as a rule, spacious enough to permit, in ordinary times, the acceptance of closed deposits. In addition, however, certain further guaranties must be assured by the officers at the branches before the reception of deposits can be permitted. Suboffices managed by only one officer, and intrusted with limited funds proportionate to the amount of the bond deposited by the officer, are not regarded as suitable places for the custody of deposits, since these

deposits can, under certain circumstances, greatly exceed in value the whole of the funds allowed to the branch. It follows that, aside from the main office in Berlin. closed deposits can be taken only at the head branch offices and independent offices, and at several of the large suboffices which are supplied with proper vaults and are managed by more than one officer. At all places where such deposits are taken it is not done solely in the interest of persons who already have other business connections with the Reichsbank, and are known to the officers of the Bank to be so trustworthy that a misuse of this arrangement for improper or criminal purposes is not to be feared. The receptacles, marked with the name of the firm or of the Christian and surname of the individual depositing them, must not only be locked, but also sealed in such a manner that nothing can be taken out without injuring the seal. Since 1881 the stipulated liability of the Reichsbank for the deposit does not exceed 5,000 marks, unless the depositor declares a higher value and pays the proper insurance fee for this amount in addition to the charge for storage. The Reichsbank undertakes no responsibility for damage arising from circumstances beyond its control or for deterioration of the object itself. There are three different rates for storage, according to the size of the deposit, and the fee must be paid for a year in advance. A proportionate reimbursement in case of an earlier withdrawal is not made; in case of temporary withdrawals of deposits, not exceeding eight working days, only a small additional fee is charged. In giving up closed deposits, the Bank takes every care to ascertain the receiver's identity; the

Reichsbank reserves to itself the right, however, to deliver the deposit to any person presenting the receipt, without further proof of his identity or of the genuineness and validity of the receipt.

All Bank offices which may receive closed deposits do so in accordance with these simple principles. In view of the great extent of this business at the main bank, a special office has been fitted up for this purpose. This office can place special rooms at the disposal of depositors on request, at a small charge, where they can open their deposits and busy themselves with the contents.

The use of this arrangement by the public has not been extensive, even though up to 1894 there was something of an increase from year to year. The number of closed deposits at the main bank and all branch offices amounted at the end of 1876 to 2,120, and at the end of 1894 to 7,558. The increase has taken place pretty equably, and has amounted on an average to little more than 300 for the single year; only in a few years has the increase reached or exceeded 400. It was relatively great in 1883 with 512, and above all, in the years 1891 and 1892, in which it amounted to 606 and 694, respectively. The reason is to be sought in the doubts which at certain times prevail among the public with regard to private banks and bankers. This was especially observed after 1890, a year in which the sudden change in an extraordinarily prosperous trade in conjunction with other unfavorable circumstances brought about the downfall of numerous large and small banking firms. The losses which many capitalists suffered through embezzlement of deposits resulted in a panic-like movement which

brought the Reichsbank numerous, but small, depositors. Since 1894 a decrease is to be recorded in the number of closed deposits in the custody of the Reichsbank; the main cause is that private banks and bankers everywhere turn their storage facilities to better account by developing this branch of business, and at the same time by charging lower fees than the Reichsbank.

The objects preserved by the Reichsbank in closed boxes, packets, and the like, represent considerable values. It is true the Reichsbank takes no cognizance of the contents of these deposits; still the sums for which the Bank is liable to its depositors give an idea of the minimum values guarded in this form. The liability of the Bank reached its highest amount in 1893, with over 310,000,000 marks; in 1900 it amounted to only 266,000,000 marks. There can be no doubt, however, that the deposited values in reality exceeded these sums, as most depositors, in order to save insurance fees, do not declare the true value, but are content with the high degree of safety and the liability of the Bank up to the sum of 5,000 marks.

As merchants generally keep their valuables in their own safes, the safe-deposit vaults are used almost exclusively by wealthy persons. Accordingly, the largest of such deposits are shown at offices in those places in which live numerous persons of independent means. Apart from the head office, which at the end of 1900 had 2,772 deposits in custody, the independent branch in Wiesbaden, a town which, according to official statistical inquiries, has comparatively more wealthy persons than other German towns, stands at the head with 489 deposits. Neverthe-

less, the use varies in the course of the year; it is regularly strongest during the summer traveling season.

OPEN DEPOSITS.

Open deposits, which date from the last years of the Prussian Bank but were first encouraged and developed by the Reichsbank, are incomparably more important and significant both for the public and for the Bank. officials of the Prussian Bank had had their attention drawn to this branch of business at the Bank of France and to its popularity with the public as early as the second half of the sixties of the previous century and, after a detailed study of French arrangements, decided to introduce the system into Germany, where it was at that time little known. The plan of erecting new bank buildings in Berlin to meet modern requirements was favorable to this scheme. The observations made at the Bank of France had taught the advocates of open deposits (dépôts libres) that different premises and a different staff were needed than in the case of closed deposits which could be accommodated without hesitation at any office fitted with a sufficiently large and safe vault without increasing to any extent the work of the officials. soon seen that the new business presupposed building arrangements which did not exist either at the old bank buildings in Berlin or in any of the branchesbuildings, moreover, the size and expense of which precluded for the present the extension of the new business to more than one place. The fact could not be overlooked that the new business could not be developed as a side

line by the existing officials, but that the orderly management by the Bank of the deposited securities would necessitate a large trained staff, especially since the Bank had determined to create for the public as perfect an establishment as possible and one surpassing the institutions abroad.

On the basis of these deliberations it was decided to limit the new business first of all to Berlin, and to prepare in the new offices, which were being erected, rooms which not merely sufficed for the start, but admitted of a later extension in case of necessity. It was impossible to foresee at that time that the rooms would prove insufficient, that twenty-five years later a great new building would be needed for security deposits, which had increased beyond all expectations. Not merely the manufacturers of safes but also burglars made use of the progress of technical skill, so that the precautionary measures of a quarter of a century before were no longer adequate. Experiences with respect to the size and cost of vaults, and the number and training of the staff, indicated that the custody of securities should still be limited to one place, and that the management of business be centralized. In the meantime, the erection of the new bank buildings in Berlin was delayed by the war with France, so that the department for the custody and management of articles of value (Kontor zur Aufbewahrung und Verwaltung von Wertpapieren) could not be opened by the Prussian Bank until May 1873. The department began with 9 officers, was assumed three years later by the Reichsbank with 37 officers, and in 1900 had a staff of 298.

The organization and further development of this business was, from the beginning, for the purpose of doing for the public what a good business man has to do in the orderly management of his securities. Thus the Bank accepted and managed, for a reasonable compensation, the deposits brought to it; it cut off interest coupons, collected interest, presented securities for payment or conversion, converted provisional certificates into final titles, took out new interest and dividend warrants, etc., although it assumed a great responsibility in some of these duties. From the very outset the object was to provide for persons ignorant of business or too busy to devote the necessary time and attention to the management of their wealth, for widows, orphans, trustees, charities, etc., the opportunity of having their affairs managed by the Reichsbank just as well as they could do it themselves, even with the most intimate knowledge of business.

The Reichsbank could offer that degree of safety which is possible or conceivable under present conditions. At the very beginning it made regulations, which were afterwards made general in the imperial act of July 5, 1896, "concerning the duties of merchants having charge of securities for others," for safeguarding depositors against any intentional or unintentional obscuration or injury of their property by the depositaries and commissioners. Under the circumstances, this act, inherently so important, could not exercise much influence on the deposit business of the Reichsbank.

It is not necessary to state that the comprehensive task which the Reichsbank had set for itself in this business could not be performed at the very outset; not only was considerable experience necessary, but also a scrupulous observation of changing conditions and necessities, and a consideration at all times of new demands. new forms have constantly been added to the ordinary deposits of private persons: trustee deposits, with or without instructions from the surrogate's court, mentioned in section 12 of the regulations, deposits with interest in favor of third persons, deposits guaranteeing an allowance to an officer on his marriage, and, finally, deposits for the withdrawal of which the consent of a third person is necessary. The terms printed on the application forms and on the deposit receipts give full information regarding the different kinds of deposits received by the Bank, together with the various services rendered by the Bank and the fees to be paid in each case.

Notwithstanding the limitation of open deposits to Berlin, the use of these arrangements is in no way restricted to the inhabitants of this town, or to such persons as travel to Berlin for the purpose, or chance to be there; the circle of patrons of the present securities department of the main branch of the Reichsbank (Kontor der Reichshauptbank für Wertpapiere) extends over all Germany and far beyond its borders into most distant lands. For business intercourse with depositors residing in Germany, the office has the advantage of being a unit in the organism of the Reichsbank, and is connected with the transfer system of the latter. If the depositor possess a transfer account at any branch of the Reichsbank he can have all payments destined for him entered to his credit. On the other hand. any payments made at the securities department can be

paid in at any branch—in many cases free of charge—to the credit of the department's account at the main bank. In addition to this, unless the depositor expressly desires something else—perhaps remittance by post—the interest. etc., is remitted by the department, by means of transfers. to the branch in the circuit in which the depositor lives: in this way some of the functions of the securities department are transferred to the branches, and the disadvantage caused to depositors outside Berlin through centralization is to some extent counterbalanced. consignment to Berlin of safe deposit securities is neither undertaken nor arranged by the branches. depositors make use of the mails or of the services of an authorized agent. Although occasional wishes have been expressed for institutions at other large places in Germany similar to the office of the main bank for securities in Berlin, there seems to be, up to the present, no urgent need for such.

The department has customers among all classes. This is best illustrated by the fact that the securities deposited by individuals fluctuate between 4,000,000 and 100,000,000 marks.

The amount of deposits depends upon business conditions and the state of the money market. The fact that the nominal value of all deposited securities from 1876 to 1900 has risen from 424,000,000 to 2,889,000,000 marks, that is, has increased sevenfold, is attributable not solely to the more intensive use of the arrangements of the securities department. There is reflected in these figures an increase in accumulated capital. The increase in deposits during the last twenty-five years has been sig-

nificant and almost uninterrupted; only a single year, 1897, was an exception. In no year from 1876 to 1894 did the increase amount to less than 90,000,000 marks; it was greatest in 1890 and 1891 with 157,000,000 and 163,000,000 marks, respectively, a result, probably, of the collapse of several great banking firms during this time. Since then the increase has not reached 90,000,000; on the contrary the holdings fluctuated between a decrease of 30,000,000 and an increase of 84,000,000 marks. not be wrong to assume that animated industrial activity. particularly the marked activity in recent years on the bourses, is a reason for this phenomenon. More recent years were unfavorable to solid investment securities which make up most of the deposits of the Reichsbank; the stringency of capital arising through economic prosperity led to the realization of large amounts of interestbearing papers, which in turn resulted in the withdrawal of many deposits. Many investment securities were exchanged in large quantities for newly issued shares of industrial undertakings; the latter, not being lasting investments but intended for resale (speculation), were therefore not deposited at first at the Reichsbank. Investment securities which had been disposed of also did not return to the Reichsbank, but formed instead, as always in times of rampant speculation, floating material on the bourses and at banks; at any rate, a large part of them fell into the hands of people who do not generally deposit at the Reichsbank. At the same time, other special reasons strongly influenced groups of securities important for the deposit business of the Reichsbank, e. g., the state-debt register in Prussia and the imperial-debt register, and the

extension of the deposit business of private banks with special arrangements (safes, etc.) which are not suitable for the Reichsbank. The repeated increase of charges for deposits, which had become necessary for covering of expenses, appears to have exercised no great influence.

It is natural that the securities deposited with the Reichsbank are for the most part of German origin, drawn up in the mark standard; the case would probably be the same even if the Bank had not charged a somewhat higher fee for the custody and management of papers drawn up abroad. Among German securities, German imperial and state bonds have for a number of years been largely represented. In 1876 they amounted to only 3.3 per cent of all papers deposited with the Bank, as against 40 per cent in 1900, after having reached the high percentage of 43 and 43.2 in 1890 and 1891, respectively. ing to amount, they have increased from 14,200,000 in 1876 to 1,120,000,000 marks in 1896, but have declined somewhat since that time, and have reached their highest point in 1900 with 1,152,000,000 marks. This extraordinary increase is the result of the increase of imperial and state debts in Germany. The state bonds of Prussia come first, as is natural from the extent of the funded debt of this state. Extraordinary growths are to be recorded in 1889 and 1890, in which the deposited sums rose abruptly from 342,000,000 to 534,000,000 and then to 722,000,000 marks, solely as a result of a displacement, the exchange into Prussian consols of large amounts of shares and railway obligations taken over by the Govern-The decrease in holdings in several years, thus ment. 1884, 1885, 1894, 1896, 1897, and 1898, is to be attributed

to the use of the state-debt register, in which only 1.3 per cent of all Prussian state bonds were registered in 1885, as against 18.2 per cent in 1897. The increasing importance of deposit institutions of the Reichsbank for these solid investment securities is shown by the fact that in 1876 only 1 per cent, in 1880 5.1 per cent, in 1893 13.2 per cent of all Prussian state bonds were in the custody of the Reichsbank. Still, this increase falls short of that of the state-debt register (Staatschuldbuch); the sums registered there have since 1893 surpassed those deposited with the Reichsbank. The conversions have exercised only an insignificant influence, since only few depositors decided on the return of the principal in place of conversion. Of greater importance, but of little significance, was the fact that some creditors of the state disposed of securities which in the future were to bear a lower interest. The influence of conversion is undoubtedly discernible in 1897, but only because many holders of Prussian 4 per cent consols had their attention drawn first to the statedebt register and to its great advantages. The registrations increased in 1897 from 1,059,000,000 to 1,159,000,000 marks-i. e., from 16.6 to 18.2 per cent of the funded debt of Prussia. The deposits held by the Reichsbank decreased from 806,000,000 to 744,000,000, or from 12.7 to 11.7 per cent of all Prussian bonds. The same is true of German imperial funds; here is shown an increase from 1,400,000 in 1877 to 220,700,000 in 1900 and a percentage increase from 0.3 to 7.6 in proportion to the total deposit holdings of the Bank. Of the total funds of the Empire there were deposited in 1887, 2 per cent, and in 1892, 10.4 per cent. Since then this figure has again sunk to 9.4 per

cent (1900), while the imperal debt register, introduced in 1892 on the lines of the Prussian register, represented in its entries during the same year 3.4 per cent, and in 1898 12.6 per cent of all imperial bonds. The decrease is also noteworthy in 1897, when the amounts on the debt register rose from 235,000,000 to 273,000,000 marks—i. e., from 10.9 to 12.5 per cent. The bonds of other federal states deposited with the Reichsbank fluctuated in proportion; they increased continuously after 1876 from 3,500,000 to 131,400,000 marks. Their percentage in total holdings has risen from 0.8 to 4.7 per cent.

Bonds of towns and provinces, certificates of land banks and mortgage banks, annuity certificates, and shares and obligations of industrial undertakings are also represented with many millions of marks in the deposits of the Reichsbank. Conclusions can also be drawn as to the extent of services which the Reichsbank rendered to states, communities, and other issuing bodies in the many conversions, renewals of coupon sheets, etc.

DEPOSITS OF MINORS.

Special kinds of deposit with the Reichsbank are the deposits of minors (Mündeldepots), introduced by section 1814 of the Civil Law Code. Securities which form a constituent part of the fortune of a minor can be accepted for custody under special conditions at all head branches and branches of the Reichsbank, under the restriction that, in accordance with the terms of the act, the papers be delivered without interest or dividend warrants, but with talons. In this form, however, the Reichsbank undertakes only the custody and not the administration of

these deposits. This particular arrangement has not been made in the case of Berlin, since the need for such a special form of deposit does not exist, owing to many other facilities offered for deposits. The charge for the deposits of minors is exceedingly small. This branch of business, first introduced on January 1, 1900, has not yet assumed any great proportions. At the end of 1900 the Reichsbank held altogether only 795 deposits of minors.

PURCHASE AND SALE OF SECURITIES FOR THE ACCOUNT OF PATRONS.

In contrast to great credit banks, the business of buying and selling securities is only of secondary importance to the Reichsbank. This is due, first of all, to the fact that the Reichsbank on principle does not invest its own funds in securities, and can accordingly procure such for its patrons only by way of commission. Furthermore, the Bank is subject to the strict provisions of the Bank Act. Commission transactions on credit, even against deposits, are forbidden; the Bank may purchase securities of all kinds for the account of patrons, apart from public authorities, only after cover has been provided, and may sell only after delivery of the securities has been made (Bank Act, sec. 13, par. 6; Statute, sec. 10). Thus the Bank is deprived of the freedom necessary for a more intensive pursuit of this branch of business.

On the other hand, it makes no special attempt to develop this line of business beyond the point to which it develops of its own accord without special efforts, as it is far less important than the other tasks of the Bank. As a privileged bank of issue, it avoids on principle competing

with private banks and bankers in a province outside its real purpose. Branch offices, as well as the securities department, are therefore instructed to accept at all times and willingly orders for the purchase and sale of securities on the ordinary terms; everything is done for the client that is necessary to a rapid and easy settlement. On no account may the Reichsbank make use of its position to get such business. The profits of the Reichsbank consist merely in the fee. Formerly, besides the brokerage amounting usually to one-half on a thousand—this amounted to one-eighth of I per cent, and now, inclusive of the brokerage, amounts to 11/2 on a thousand. is a rate which, in spite of its moderateness, is not calculated to do damage to the business of private banks. Under these circumstances, profits and losses on market prices can not arise for the Bank. In carrying out commissions the branch taking the order makes use, as far as it can not settle the business itself, of the services of the office at the place where the particular security has a regular market. In most cases, this market is in Berlin; for south Germany it is in Frankfort-on-the-Main. Reichsbank carries out transactions on the Bourse directly through its special agents.

Owing to the preeminence of the Berlin Bourse, nearly the whole business in the purchase and sale of stocks and shares, including that arising from orders received by branches, is concentrated at the head office, the securities department, which settles all transactions in this line through a special Bourse department. The importance of the department for this business of the Bank is great, in that most orders originate from depositors. They are given direct to the department or are communicated by a branch office; thus the business in securities (*Effekten-kommissionsgeschäft*) of the Reichsbank is mainly characterized as a part of the management of wealth carried out by the Reichsbank for its depositors.

The total transactions of the securities department in stocks and shares for its depositors, for third parties, or for the Empire, which has frequently made use of it for the sale of its own debt certificates, have fluctuated greatly. They amounted in 1876 to 42,500,000 and in 1900 to 157,000,000 marks.

CHAPTER XI.

THE REVISED BANK ACT OF JUNE 7, 1899, AS A RESULT OF THE PREVIOUS DEVELOPMENT.

EXPERIENCES WITH THE GERMAN BANK CONSTITUTION.

The constitution of the Reichsbank has proved, in the quarter of a century of its existence, to be a structure in the main well suited to its purposes. It has permitted a progressive development of the central financial institution of Germany, and has rendered possible a satisfaction of the great demands called forth by the extraordinary development of economic forces. The Reichsbank would not have been in a position to render to the German national economic system all the services set forth in the preceding chapters, if its constitution had not been along the right lines.

On the other hand, the undreamt-of economic development in the last decade have suggested the question whether certain alterations in the details of the existing constitution of the Bank are necessary to enable the Reichsbank to meet fully and without embarrassing friction in the future the increased needs of trade. Suggestions have been made of enlarging the basis on which the Reichsbank stands, of increasing means and privileges which it needs for the discharge of its duties.

In order to admit of desirable alterations the right was reserved to the Empire, in the Bank Act of March 14, 1875, of abolishing the Reichsbank, first on January 1, 1891, and then at intervals of ten years, after a preliminary notice of one year, or of acquiring all the shares of the Reichsbank at their nominal value. Upon the expiration of the first period of fifteen years the Empire was content with demanding a larger share of the net profits of the Reichsbank. The fall of the interest rate since the middle of the seventies made desirable a modification of the principles for the calculation of the dividends of shareholders. No further change had appeared necessary.

The second occasion on which the privilege of the Reichsbank could have been withdrawn was January 1, 1901.

The state governments were on this occasion of the opinion that there was no reason for radical changes in the constitution of the Reichsbank. They were so satisfied with the union of private capital and state guidance that they were determined to oppose strongly all endeavors to transform the Reichsbank into state property (to acquire all shares for the Empire).

On the other hand, this was regarded as a suitable occasion for taking into account the experiences of the last decade and the progressive development of German economic life by strengthening the working capital of the Reichsbank and by taking measures to render its discount policy effective against that of the private banks of issue.

THE REVISED BANK ACT (Banknovelle).

On the basis of these deliberations the bill to amend the Bank Act of March 14, 1875 (Entwurf eines Gesetzes betreffend die Abänderung des Bankgesetzes vom 14 März 1875) was laid before the Reichstag at the beginning of 1899 and contained the following proposals.

The capital stock of the Reichsbank was to be raised from 120,000,000 to 150,000,000 marks, and the reserve fund was gradually to be brought up from 30,000,000 to 60,000,000 marks; the tax-free note allowance of the Reichsbank was to be increased from 293,400,000 to 400,000,000 marks. To insure a more uniform discount policy the Bundesrat was to use its power to revoke the right to issue notes on and after January 1, 1901, in the case of those private banks of issue which would not promise not to discount under the discount rate of the Reichsbank on and after January 1, 1901.

In addition, the bill proposed a redistribution of profits more favorable to the Empire, in view of the enormous business proceeds and of the high dividends of the shareholders.

Finally, there were several provisions of minor importance with reference to the relation of the Reichsbank to those notes of the former Prussian Bank which had not yet been cashed, and to advances on bonds of land credit institutions and mortgage joint stock banks which are issued on the basis of loans to German communal corporations.

The bill underwent important changes in the Reichstag; no radical departures were made from the fundamental ideas which on the whole were in the same direction as the government proposals. The increase of capital and of the tax-free note contingent of the Reichsbank were made greater than suggested by the bill. The plan of binding private banks of issue to the discount policy

of the Reichsbank was moderated and combined with restrictive regulations concerning the private discount rate of the Reichsbank. The dividends of the shareholders were curtailed in favor of the Empire more than was intended in the bill.

The Bundesrat assented to the changes decided upon by the Reichstag; the general meeting of shareholders of the Reichsbank declared itself in favor of the provisions. The bill became a law on June 7, 1899.

THE INCREASE OF THE CAPITAL AND RESERVE FUND OF THE REICHSBANK.

The increase of the Reichsbank's means (share capital and reserve fund) was required by the expansion of the business activity of the Bank (cf. Table 6). The average interest-bearing investments of the Reichsbank (bills, lombard loans, and discounted securities) rose from 454,200,000 marks in 1876 to 900,300,000 marks in 1900. In the same time the average note circulation grew from 684,900,000 marks to 1,138,600,000 marks, and the total demand liabilities, inclusive of note circulation, from 903,700,000 marks to 1,651,300,000 marks.

The amount of share capital is not as important to a central bank of issue as is often stated. The most important floating capital of a bank of issue are its notes and its deposits. Monetary circulation is adapted to the variations of money demands mainly by the elastic note issue, through which the existing currency can be increased within the limits necessary for the redemption of notes. An increase of the capital of a bank of issue, on the contrary, does not create any new currency, but only transfers

cash from free circulation to the coffers of the bank; the currency in free circulation is thus diminished, and this diminution must be readjusted by heavier demands on the bank. The assumption that a permanent reduction of its discount rate would be possible by strongly increasing the capital of a bank of issue is based therefore on irrelevant suppositions and on misconceptions as to the importance of capital for a bank of issue. Capital is mainly a guarantee fund for the holders of notes, the owners of balances, and other creditors of the bank. The character of capital as guarantee fund is not changed by the fact that the Reichsbank employs its means, so far as they are not invested in business sites, etc., in granting short credit, just as it uses notes and balances, in contrast to other great banks of issue which have invested their capital in government securities. The employment of capital in bill and lombard transactions is safe enough, and has an advantage over investments in stocks and shares in that such capital is easier to realize.

Even if the Bank's own means be regarded only as a fund to secure its creditors, there are excellent reasons for maintaining a certain general proportion between this fund and the liabilities of the Bank; thus the unexpected increase of the business and liabilities of the Reichsbank in the last quarter of a century, made desirable a certain increase of the Bank's own means.

Besides this general point of view, the extension of the business activity of the Reichsbank, also the increase of its branches—from 182 at the beginning of 1876 to 310 on January 1, 1900, as noted—and of the real estate account of the Reichsbank spoke in favor of an increase

of share capital and reserve fund. Whereas the book value of the Reichsbank's real estate amounted to only 13,300,000 marks at the end of 1876, it was 35,600,000 marks at the beginning of 1900, and so considerably exceeded the total reserve fund.

The great increase in lombard investments also made a reenforcement of the Bank's own means appear expedient. Lombard holdings are legally not admitted as cover for notes, and are also not so suitable as bill investments as cover for deposits repayable on demand, owing to their origin and less liquid character. In granting lombard loans, therefore, the Bank can use practically only its own means. The average lombard holdings of the Reichsbank increased from a total of 51,000,000 marks in 1876 to 108,000,000 marks in 1897. Even though they still fell short of the original share capital of the Reichsbank, great fluctuations have occurred in lombard holdings only within the various years. The highest figures attained in these investments were 200,000,000 marks. Considerable sums from deposits were at such times invested in lombard loans in addition to the Bank's own funds. An increase of the original share capital was the only way to develop lombard investments without making increased use of deposits.

The state governments considered an increase of capital by 30,000,000 marks and a gradual increase of the reserve fund by an equal amount to be sufficient. In the Reichstag, on the contrary, a greater increase of the Bank's means was demanded from various quarters. Although the committee appointed to consider the bill decided in the first two readings by a considerable majority in favor

of the government proposals, it was resolved at the third reading, as a compromise between the parties, that the original capital be raised by 30,000,000 marks up to December 31, 1900, and by another 30,000,000 marks up to December 31, 1905. With respect to the reserve fund, the increase of 30,000,000 marks remained. The Reichstag gave its consent to this resolution, and this increase of capital was recognized by the government, not as necessary and expedient but as reasonable.

When the increase of capital and reserve fund has been carried into full effect, the Reichsbank's own means will amount to 240,000,000 marks (against 150,000,000 marks hitherto). With this amount it will surpass all other great banks of issue, with the exception of the Bank of England, which has means of its own invested to a large extent, amounting altogether to £17,553,000 (358,600,000 marks). Up to the end of 1900 the Reichsbank was fourth in this respect; it was behind the Bank of France and the Bank of Austria-Hungary.

In order to make new shares accessible as far as possible to less wealthy investors, the Reichstag made an amendment to the government bill, providing that the new shares should be drawn up in amounts of 1,000 marks, whereas the old shares have a nominal value of 3,000 marks each.

The Chancellor was empowered to negotiate the new shares by offering them for public subscription, and to fix the rate at which they were to be offered, as well as the periods within which the capital was to be paid in. The negotiation of the 30,000,000 marks to be issued by December 31, 1900, took place in October 1900, at a rate

of 135. The premium obtained was added to the reserve fund, which was thus brought up to 40,498,000 marks in the first weekly return of 1901.

EXTENSION OF THE TAX-FREE NOTE CONTINGENT OF THE REICHSBANK.

As with share capital, the development of the Reichsbank made an extension of its note issue desirable. system of indirectly limiting the note emission of German banks of issue by means of the 5 per cent note tax has been described in detail (pp. 22, 81, and 205). It may be mentioned again that, with respect to private banks of issue, the system has had the effect of restricting their uncovered note issue mainly to the tax-free note contingents assigned to them, but that for the discount policy of the Reichsbank, on the contrary, it could be only a general guiding principle. While the average uncovered note circulation of the Reichsbank has always been considerably lower than its contingent, and its cash holdings have at times exceeded the total note circulation, there have been at other times large excesses of the contingent. The number and extent of these excesses have increased, especially in the last ten or fifteen years.

The cause of this phenomenon lies in the fact that with the economic development and the increase of German monetary circulation to about double its extent at the beginning of the seventies, the periodical fluctuations in the money demands which the Reichsbank must satisfy by means of its elastic note issue, have also considerably increased. The increase of the range between the lowest and highest points reached by interest-bearing investments of the Reichsbank, which has already been discussed in the chapter on discount policy, finds its counterpart in the increase of range between the lowest and highest points reached by uncovered note circulation. In the discussions of the Revised Bank Act, reference was made to the fact that the range between the maximum and minimum of the uncovered note issue of the Reichsbank has risen from 325,000,000 marks in the period 1879–1883 to 754,000,000 marks in the period 1894–1898.

The note contingent of the Reichsbank, originally fixed at 250,000,000 marks, has been gradually increased to 293,400,000 marks through the addition of the contingents of banks of issue ceasing to exist as such, and at this figure it amounted to almost two-fifths of the difference between the maximum and minimum of note circulation during the five years 1894–1898. There can be no doubt that no limitation of note issue could prevent the Reichsbank from satisfying the fluctuations of money demand, rooted as these fluctuations are in our economic life.

While this point of view favored an extension of note contingent, such an extension was made possible, even though scrupulous care be insisted upon for the redemption of bank notes, by the increase of the metal reserve of the Reichsbank in recent years. Excesses of note contingent have frequently occurred even when the cash cover was sufficient for notes and for all demand liabilities. In the deliberations over the Bank Act in 1875, the government had expressed the view that excesses of note contingent would appear first when metal cover for notes dwindled to about 55 per cent. Excesses of note contingent have frequently occurred at the Reichsbank

in the last few years (since 1895) while the metal cover was more than 70 per cent.

Note contingent, which has gradually become too small. has up to the present not disturbed the commercial world very much, because the Bank officials have refrained, as far as possible, from raising the discount to 5 per cent and higher, and have preferred to defray, out of the funds of the Reichsbank, the amount of tax in excess of discount receipts. But, as stated in the arguments to the Revised Bank Act, such a practice, amply justified by considerations for the common welfare, can be maintained only so long as the excesses are rare and do not last too long. The frequency, duration, and extent of excesses have, however, increased in such a measure since 1895 that sixteen excesses occurred in 1898 and twenty in each of the years 1899 and 1900. Each change of quarter in and since 1896 has subjected the Reichsbank to the note tax, and in 1899 the tax-free limit was exceeded during the whole of the last three months.

To insure the necessary freedom to the Reichsbank in the future, the government bill proposed raising the tax-free note contingent to 400,000,000 marks. The complete abolition of the note tax for the Reichsbank, which had been demanded in many quarters, was not insisted upon, although the Reichsbank has never allowed itself to be mechanically influenced in its discount policy by the intentions of this system. In private banks of issue the note tax had tended to limit uncovered note circulation to the amount of tax-free note contingents. It was desirable to avoid a one-sided abolition of note tax for

the Reichsbank. Besides, the whole system had for the Reichsbank a partial advantage in that an excess of the cax-free limit of circulation is always a kind of warning signal for the business world and paves the way for necessary advances in the discount rate.

This last circumstance seemed to dictate that, if the note tax was to be retained at all for the Reichsbank, the increase of tax-free note contingent must not be too great. The same compromise, however, which had led to the increase of share capital, caused an increase of the contingent of the Reichsbank to 450,000,000 marks after the committee of the Reichstag had accepted in the first two readings the increase to 400,000,000 marks proposed by the government.

BINDING OF THE DISCOUNT RATE OF PRIVATE BANKS OF ISSUE TO THAT OF THE REICHSBANK.

Whereas the share capital and tax-free note issue previously allowed to the Reichsbank had not caused inconveniences and the increase had been made only to avoid disturbances for the future, the fact that private banks of issue could thwart the well-considered discount policy of the Reichsbank through their note privileges had caused inconveniences in the time elapsed. The difficulties of the Reichsbank's position have been described. When the Bank sought to keep the discount rate up, in the interest of inland trade, foreign trade, or of the standard, the private banks of issue could frustrate this plan by granting cheap credit through note privileges. The private banks of issue had agreed privately to discount below the rate of the Reichsbank only in case of a threatened expor-

tation of gold. How much the private banks of issue have underbid the discount rate of the Reichsbank, even in years of stringency during the last period of expanding trade, is evident from the fact that the average percentage yield of bill investments of private banks of issue was considerably lower than that of the Reichsbank. The average percentages follow:

Year.	Reichs- bank.	Private banks of issue.
1895	2.7	2.3
1896	3 · 4	3.2
1897	3.7	3 · 4
1898	4.1	3.9
1899	4.9	4.1

Since the average bill holdings of private banks of issue amount to about one-third of the Reichsbank's bill holdings, the underbidding of the Reichsbank's discount by private banks of issue must be regarded as a considerable hindrance to the efficiency of the discount policy of the Reichsbank. The discount policy of the Reichsbank is determined exclusively by considerations for the public interest, while the fixing of the discount rate of private banks of issue, as private profit-earning institutions, is influenced predominantly by regard for business advan-The difficulties to the discount policy of the Reichsbank through the action of private banks of issue were to be overcome only by extending to all cases the arrangement made privately for the special case of gold exportation; that is, of binding private banks of issue legally to the discount rate of the Reichsbank. It was sufficient to make it impossible for private banks of issue to underbid the Reichsbank's discount; no prejudice can result from a rate exceeding that of the Reichsbank, either for the whole business world or for takers of credit, who can at any time make claims on the credit of the Reichsbank.

The Revised Bank Act, therefore, provided that the Bundesrat use its power to give notice for January 1, 1901, against those private banks of issue which did not bind themselves before December 1, 1899, not to discount under the rate of the Reichsbank on and after January 1, 1901.

This regulation at once met with animated opposition on the part of those circles which up to that time had reaped advantage from the cheaper credit of private banks of issue, and which, on political or economic grounds. are averse to centralization of banking. The disadvantages of the existing situation were, however, so evident that everyone recognized, in varying degrees, that the discount policy of private banks of issue ought to be influenced by that of the Reichsbank. One faction would legally bind private banks of issue to the discount rate of the Reichsbank only in case of a threatened exportation of gold; another faction would bind them only in case the Reichsbank's discount was 4 per cent or more, and at other times allow the private banks of issue to discount one-eighth, one-fourth, or one-half of r per cent under the rate of the Reichsbank. Finally a decision was arrived at, according to which private banks of issue had to bind themselves not to discount below the rate of the Reichsbank as soon as this rate reached or exceeded 4 per cent, and at other times not to discount under the official discount rate of the Reichsbank by more than one-fourth of I per cent. When the Reichsbank discounts at a private rate, private banks are to discount by not more than one-eighth of I per cent under that rate. The Bundesrat was to revoke the charters of those banks which would not agree to this. Before the appointed day (December I, 1899) all private banks of issue undertook the duties with respect to their discount rate.

Although the final wording of this important regulation is weaker than in the bill as laid before the Reichstag, yet it signifies a considerable advance as compared with the previous condition. The Reichsbank will always be obliged to keep a discount rate of at least 4 per cent when its discount policy pursues definite aims in the public interest, when it wants to prevent an outflow of gold or to induce inland trade to assume an attitude of reserve; in this way its discount policy can not be thwarted in the future by private banks of issue.

REGULATIONS WITH REGARD TO THE PRIVATE DISCOUNT RATE OF THE REICHSBANK.

During the deliberations in the Reichstag on the question of fixing the discount rate of private banks of issue, the discussion was directed to the Reichsbank's practice of discounting bills of certain descriptions under its official rate at the so-called private rate.

The view expressed on this occasion in the Reichstag, that the private rate represents an unjustifiable preference for certain individuals and large capitalistic circles proved to be erroneous. It was demonstrated that the conditions for the private rate were exactly similar for all persons having intercourse with the Reichsbank and for all branches of business; that the private rate has actually benefited a large number of middle-class business people, and that it has been used by credit associations and, through their agency, by artisans, small tradespeople, and farmers. It was further proved that the Reichsbank has had recourse to discounts below its rate only in times of free circulating money, to which the historical statement given above of the discount policy of the Reichsbank bears witness. In times when money is very abundant, however, a discount under the official discount rate is for the Reichsbank a suitable means of keeping in touch with the money market and of assuring itself of a certain number of first-class bills.

These reasons determined the Reichstag not to forbid entirely discounts under the official rate. A regulation was, however, inserted in the act, according to which, on and from January 1, 1901, the Reichsbank may discount under its rate, publicly promulgated according to section 15 of the Bank Act, only when this rate is less than 4 per cent. The current private discount rate must be published in the Imperial Gazette (Reichsanzeiger).

This limitation is therefore of no practical importance, for the Reichsbank for some time past has discounted at the private rate only when its official rate was $3\frac{1}{2}$ or 3 per cent. As has already been stated, discounts below the official rate have been discontinued altogether since April 1896, in view of the continued strained condition of the money market (cf. p. 278). The Reichsbank's freedom is therefore not impeded by the aforementioned provision of the Revised Bank Act.

The other regulations of the Revised Bank Act are not of the same importance as those discussed.

DISTRIBUTION OF THE NET PROFITS OF THE REICHSBANK BETWEEN SHAREHOLDERS AND THE EMPIRE.

The change in the distribution of the net profits of the Reichsbank between the shareholders and the Empire has no influence on the business activity of the Bank itself, but merely disposes of the financial proceeds of this activity. To be sure, there was the danger that through changes of too radical a nature the character of the Reichsbank as an institution established with private capital and under the guidance and supervision of the Empire might be modified in the direction of the so-called conversion into state property. In the distribution of the profits, the foundation of the Bank on private capital is expressed in the fact that shareholders receive not a fixed interest but a dividend which varies with business proceeds. The more the dividend of shareholders is cut down, and a fixed interest approximated, the more the establishment on private capital becomes a mere form, while in reality the shareholders are ultimately nothing but creditors who have advanced to the Empire the capital necessary for carrying on the Reichsbank, against a fixed interest or one fluctuating within a very limited range.

The Revised Bank Act of 1889 had already limited the shareholders' portion of the profits as compared with the provisions of the Bank Act, so that a preliminary dividend of 3½ per cent, instead of 4½ per cent, was allotted to the shareholders; 20 per cent of the surplus went to

the reserve fund until the latter reached in 1891 the prescribed amount of 30,000,000 marks, the remaining surplus being divided equally between the Empire and the shareholders until the dividend of the latter reached 6 per cent (instead of 8 per cent in the Bank Act), and then the Empire received three-quarters, and the shareholders one-quarter of any remainder.

The bill laid before the Reichstag at the beginning of 1899 provided for an alteration in this apportionment only in that it proposed to assign again 20 per cent to the reserve fund, after the preliminary dividend of 31/2 per cent had been paid, and to divide the profits into threefourths for the Empire and one-fourth for the shareholders when the dividend reached 5 per cent, instead of 6 per cent. Since in 1889 the marked decline of the interest rate, as compared with the first half of the seventies. had occasioned a curtailment of the dividends of the shareholders, and since this decline has not continued in more recent years, but had advanced somewhat, no grounds existed for a further reduction in the dividends of the shareholders. The change proposed by the government bill was based on the large business earnings of the first few years-which, however, could not be counted upon to continue—and in the decrease of the note tax due to the Empire caused by the expansion of the taxfree note contingent.

In the Reichstag, however, more radical proposals met with strong approval. The committee decided in the second sitting that the surplus remaining after the endowment of the reserve fund should be divided between the Empire and the shareholders until the dividend of the latter reached 6 per cent. The whole of the remainder, over and above this, was to go to the Empire. After guaranteeing the shareholders a dividend of 31/2 per cent, for which the reserve fund itself is to be drawn upon if need be, this resolution tried to fix a maximum dividend. Thus the participation of private capital in the sense discussed above would have been altered, and the Reichsbank would have become more than formerly a kind of state bank. The government declared a maximum dividend limit unacceptable, because such a limit tends to convert the Reichsbank into state property. As the extreme limit, it made a compromise proposal, which, after the endowment of the reserve fund, assigned three-fourths of the surplus to the Empire and one-fourth to the shareholders. This motion finally received the consent of the Reichstag.

The remainder of the act deals with securities admitted to lombard loans and the notes of the former Prussian Bank.

LOANS ON BONDS ISSUED BY LAND-CREDIT INSTITUTIONS AGAINST LOANS TO COMMUNAL CORPORATIONS.

The Bank Act of 1875 provided in section 13, 3b, that the Reichsbank be authorized to grant lombard loans at interest on mortgage bonds (*Pfandbriefe*) of agricultural, communal, or other land-credit institutions of Germany under state supervision and of German joint-stock mortgage banks, to not more than three-quarters of their market value. The indicated institutions draw up, besides mortgage bonds, bonds payable to bearer, in virtue of loans to home communal cor-

porations; these bonds, owing to the absence of any deposited pledge, can not be called mortgage bonds, but are at least as safe as mortgage bonds. These bonds had up to this time been excluded from the lombard business of the Reichsbank through the wording of section 13 of the Bank Act. The exclusion was removed by article 6 of the Revised Bank Act.

WITHDRAWAL OF NOTES OF THE PRUSSIAN BANK.

Finally, the notes of the former Prussian Bank were taken over by the Reichsbank. The notes, the values of which were declared in terms of the taler standard, have long since been recalled, but have not been precluded from redemption; they are even now being cashed at the main office of the Reichsbank. At the end of 1900 there were 19,548 notes, with a total value of 1,718,190 marks, which had not been redeemed. Of the notes issued by the Prussian Bank in 1875 and based on the mark standard, of which up to the present only the 100-mark notes have been formally recalled, there are still 869,300 marks outstanding. The notes of the Prussian Bank not yet redeemed amount altogether to 2,587,490 marks.

Most of these notes are probably no longer in existence, but have been lost in the course of time. The Revised Bank Act wants the Empire to have the profits accruing therefrom. It binds the Reichsbank to make over to the treasury of the Empire the amount of notes of the Prussian Bank still outstanding on January 1, 1901. In return, these notes are no longer to be reckoned in determining the note circulation of the Reichsbank. The Reichsbank is bound, as before, to redeem any notes

eventually turning up, but the Empire must compensate the Bank for any sums thus paid.

RECAPITULATION.

All in all, the Revised Bank Act of June 7, 1899, has based its conclusions upon the previous development in a happy manner. It has not attacked the tested foundations of the German banking constitution and of the Reichsbank in particular, and has insured their preservation for the future by seasonable reforms. Above all, the Revised Bank Act has given the Reichsbank, in accordance with the important expansion of its business, a broader material basis by increasing its own means and a greater freedom by extending its note privilege; it has guaranteed the necessary unity in the regulation of German monetary circulation by binding private banks of issue to the discount rate of the Reichsbank. On this foundation the Reichsbank will succeed, it may confidently be hoped, in fulfilling its great tasks of serving as a support and mainstay of the German monetary system, of helping it over difficult periods, of assisting the whole German nation in its vigorous growth, and of sheltering it from all dangers which can arise from shocks to its monetary and credit system.

APPENDIX.

LAW OF JUNE 1, 1909, CONCERNING CHANGES IN THE BANK ACT.

We, William, by the grace of God, German Emperor, King of Prussia, etc., ordain, in the name of the Empire and with the consent of the Bundesrat and the Reichstag, the following:

ARTICLE 1.

Section 24 of the Bank Act of the 14th of March, 1875, is changed to the following form by the repeal of article 2 of the law of June 7, 1899.

The net annual profit of the Reichsbank is to be divided at the close of each year in the following manner:

- 1. In the first place, a regular dividend of $3\frac{1}{2}$ per cent of the capital is to be distributed among the shareholders.
- 2. After 10 per cent of the balance has been transferred to the reserve fund the new balance shall be distributed in the proportion of one-fourth to three-fourths among the shareholders and the imperial treasury, respectively.

If the net earnings are less than $3\frac{1}{2}$ per cent of the capital, the difference is to be made up from the reserve fund.

The premium gained on the sale of Reichsbank shares is to be added to the reserve fund.

Back dividends having a four-year standing after maturity are canceled in favor of the Bank.

ARTICLE 2.

Article 5 of the law of June 7, 1899, is amended by the following provision:

The total amount of tax-free uncovered notes to be apportioned to the Reichsbank, according to section 9 of the Bank Act, including the shares of the banks numbered 2 to 12, 15 to 17, and 20 to 33, which have accrued to the Reichsbank, is to be fixed at 550,000,000 marks, and the total note circulation for all the banks is to be raised to 618,000,000 marks.

The amount of notes in circulation, according to the reports which are submitted at the end of March, June, September, and December of each year, for the purpose of determining the tax (section 10 of the Bank Act), raises the shares of the Reichsbank to 750,000,000 marks, and the aggregate circulation to 818,771,000 marks.

ARTICLE 3.

The notes of the Reichsbank are legal tender. In all other respects the provisions of section 2 of the Bank Act remains in force.

ARTICLE 4.

- I. In section 18 of the Bank Act the words "German currency" are changed to "German gold coins."
- II. Section 19, paragraph 1, of the Bank Act is changed to the following form:

The Reichsbank is required to accept at full face value the notes of those banks which are announced by the Imperial Chancellor, according to section 45 of this act, not only in its main office in Berlin, but also in its branch offices either in cities of more than 80,000 inhabitants or in the city where the bank which has issued the notes is located, as long as the issuing bank punctually fulfills its duty of note redemption.

Similiarly, the Reichsbank is required to exchange to bearer its notes for the notes of each of the announced banks in its branch offices which are located in the same States where the issuing bank is operating, as far as the amount of the notes of these branch offices permit such exchanges.

The notes accepted or exchanged, according to paragraphs 1 and 2, may be presented by the Reichsbank either for redemption or as payments to the same bank which issued them, as well as payments in the city where the latter has its principal office.

ARTICLE 5.

- I. In section 8, paragraph 6 (C), of the Bank Act, the words "and checks" shall be inserted after "bills."
- II. The following words shall be inserted in section 13² of the Bank Act after "solvent:" "as well as checks which are indorsed by not less than two persons known to be solvent."
- III. The following words shall be inserted in section 17 of the Bank Act after "solvent:" "or in checks which are indorsed by not less than two persons known to be solvent."
- IV. In section 32, paragraph 1, of the Bank Act, after the phrase "the sale and purchase of gold and bills," the words "and checks" shall be inserted.

V. The following provision shall be appended to section 47 of the Bank Act:

SEC. 47^a. With regard to the reserve against the circulating notes of the private note banks which are exempt from the restrictions of section 42, the provisions of section 17 shall be applicable.

ARTICLE 6.

I. Article 6 of the law of June 7, 1899, is amended as follows:

The following sentence is to be added to section 13 of the Bank Act, paragraph $_3$?— (C), after the words "of their exchange value."

"To these are to be added the bonds of domestic quasi public agricultural credit institutions, which are issued to bearer, as well as the bonds of the above institutions and banks, which are payable to bearer and which are issued on the basis of loans granted to a domestic municipal corporation or which are guaranteed by such a corporation."

- II. The following provision is to be inserted under figure 9 in section 13 of the Bank Act:
- "9. To issue interest-bearing loans for not longer than three months on pledges of the right of claim of debts registered in the debit books of either the Empire or one of the German States, to the maximum amount of three-fourths of the exchange value of the converted debt."
- III. Section 20 of the Bank Act is appended by the following provisions to be designated as sections 20a and 20b.

SEC. 20a. If the right of claim of debts registered in the debit books of either the Empire or one of the German States (sec. 13, fig. 9) is pledged to the Reichsbank, the signatures of the persons, for which the Reichsbank is kept responsible according to section 38, are adequate for the recording of the pledge in the debit books in the name of the Reichsbank. Inasmuch as this latter provision requires the signatures of two members of the board of directors, the authentication of the application is valid when made by other officials of the Reichsbank named by the board of directors to the debt administration.

The provisions of section 183 of the law concerning voluntary jurisdiction are applicable to the authentication.

SEC. 20b. If the pledge of the right of claim of debts has been registered in the name of the Reichsbank in the debit books (sec. 13, fig. 9), the Reichsbank retains the right to the pledge even when it has been transferred to a third party, unless the right of the latter has been recorded in the debit books before the entrance of the pledge of the right to the claim or if at the time of registration the right of the third party has been either known or, save for gross negligence, could have been known to the Reichsbank.

If the debtor does not meet his obligations guaranteed by the pledge of the right to the claim, the debt administration is authorized and required, upon the written request of the Reichsbank, to issue to the latter, without demanding any proof of the delay on the part of the pledger to meet his obligation, certificates of indebtedness to bearer for the whole or a corresponding part of the claim, unless such issue is prohibited by judicial order or when the right to request such issue or to make other arrangements was recorded in favor of a third party prior to the pledge of the right to the Reichsbank. The pledge of the right of claims may also be used for the purpose of defraying the cost incurred in the issue of the certificates of indebtedness.

The debt administration shall inform the Reichsbank, at the time of issuing certificates of indebtedness to the latter of the later transfers of the right to the claim.

The provisions of section 20 stipulate for the compensation to be demanded by the Reichsbank out of the certificates of indebtedness to be issued by the debt administration.

ARTICLE 7.

Section 22 of the Bank Act is to be changed to the following provision:

The Reichsbank is required to take charge of the business of the imperial treasury without compensation.

The Reichsbank is authorized to assume the obligation of administering the similar business of the federated States.

ARTICLE 8.

Articles 3, 4, 5, and 6 of this law shall go into effect on the 1st of January, 1910. The other provisions shall go into effect on the 1st of January, 1911.

Issued over our imperial signature and seal.

Given at the New Palace, the 1st of June, 1909.

(Signed) WILLIAM,

VON BETHMANN HOLLWEG.